


STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING				FORM 3 AMENDED REPORT <input checked="" type="checkbox"/>		
<b>APPLICATION FOR PERMIT TO DRILL</b>				<b>1. WELL NAME and NUMBER</b> BONANZA 1023-6K2CS		
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>				<b>3. FIELD OR WILDCAT</b> NATURAL BUTTES		
<b>4. TYPE OF WELL</b> Gas Well Coalbed Methane Well: NO				<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b>		
<b>6. NAME OF OPERATOR</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.				<b>7. OPERATOR PHONE</b> 720 929-6007		
<b>8. ADDRESS OF OPERATOR</b> P.O. Box 173779, Denver, CO, 80217				<b>9. OPERATOR E-MAIL</b> Kathy.SchneebeckDulnoan@anadarko.com		
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> UTU38419		<b>11. MINERAL OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>		<b>12. SURFACE OWNERSHIP</b> FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>		
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b>				<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b>		
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b>				<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>		
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>		<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input checked="" type="checkbox"/> (Submit Commingling Application) NO <input type="checkbox"/>		<b>19. SLANT</b> VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>		
<b>20. LOCATION OF WELL</b>	<b>FOOTAGES</b>	<b>QTR-QTR</b>	<b>SECTION</b>	<b>TOWNSHIP</b>	<b>RANGE</b>	<b>MERIDIAN</b>
<b>LOCATION AT SURFACE</b>	1888 FSL 1720 FWL	NESW	6	10.0 S	23.0 E	S
<b>Top of Uppermost Producing Zone</b>	2165 FSL 1485 FWL	NESW	6	10.0 S	23.0 E	S
<b>At Total Depth</b>	2165 FSL 1485 FWL	NESW	6	10.0 S	23.0 E	S
<b>21. COUNTY</b> UINTAH		<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 1485		<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 516		
		<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)</b> 290		<b>26. PROPOSED DEPTH</b> MD: 8594 TVD: 8567		
<b>27. ELEVATION - GROUND LEVEL</b> 5221		<b>28. BOND NUMBER</b> WYB000291		<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> Permit #43-8496		
<b>ATTACHMENTS</b>						
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>						
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER			<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN			
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)			<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER			
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)			<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP			
<b>NAME</b> Gina Becker		<b>TITLE</b> Regulatory Analyst II		<b>PHONE</b> 720 929-6086		
<b>SIGNATURE</b>		<b>DATE</b> 01/04/2011		<b>EMAIL</b> gina.becker@anadarko.com		
<b>API NUMBER ASSIGNED</b> 43047514680000		<b>APPROVAL</b>  Permit Manager				

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	8594		
Pipe	Grade	Length	Weight			
	Grade I-80 Buttress	0	11.6			

Proposed Hole, Casing, and Cement						
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Surf	11	8.625	0	2110		
Pipe	Grade	Length	Weight			
	Grade J-55 LT&C	0	28.0			

**Kerr-McGee Oil & Gas Onshore. L.P.****BONANZA 1023-6K2CS**

Surface:	1888 FSL / 1720 FWL	NESW	Lot
BHL:	2165 FSL / 1485 FWL	NESW	Lot

Section 6 T10S R23E

Unitah, Utah

Mineral Lease: UTU-38419

**ONSHORE ORDER NO. 1****DRILLING PROGRAM**

1. & 2. **Estimated Tops of Important Geologic Markers:**  
**Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1232	
Birds Nest	1494	Water
Mahogany	1859	Water
Wasatch	4248	Gas
Mesaverde	6405	Gas
MVU2	7346	Gas
MVL1	7922	Gas
TVD	8567	
MD	8594	

3. **Pressure Control Equipment** (Schematic Attached)

*Please refer to the attached Drilling Program*

4. **Proposed Casing & Cementing Program:**

*Please refer to the attached Drilling Program*

5. **Drilling Fluids Program:**

*Please refer to the attached Drilling Program*

6. **Evaluation Program:**



*Please refer to the attached Drilling Program*

7. **Abnormal Conditions:**

Maximum anticipated bottom hole pressure calculated at 8,567' TVD, approximately equals 5,248 psi (calculated at 0.61 psi/foot).

Maximum anticipated surface pressure equals approximately 3,364 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. **Anticipated Starting Dates:**

*Drilling is planned to commence immediately upon approval of this application.*

9. **Variances:**

*Please refer to the attached Drilling Program.*

*Onshore Order #2 – Air Drilling Variance*

*Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2*

- *Blowout Prevention Equipment (BOPE) requirements;*
- *Mud program requirements; and*
- *Special drilling operation (surface equipment placement) requirements associated with air drilling.*

*This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.*

*The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.*

*More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.*

***Background***

*In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.*

*Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.*

*The air rig is then mobilized to drill the surface casing hole by drilling a 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.*

*KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.*

***Variance for BOPE Requirements***

*The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.*

***Variance for Mud Material Requirements***

*Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.*

***Variance for Special Drilling Operation (surface equipment placement) Requirements***

*Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.*

*Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.*

*Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and*

on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

*Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.*

*Variance for FIT Requirements*

*KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). The air rig operation utilizes a 5M BOPE when drilling. This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.*

***Conclusion***

*The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.*

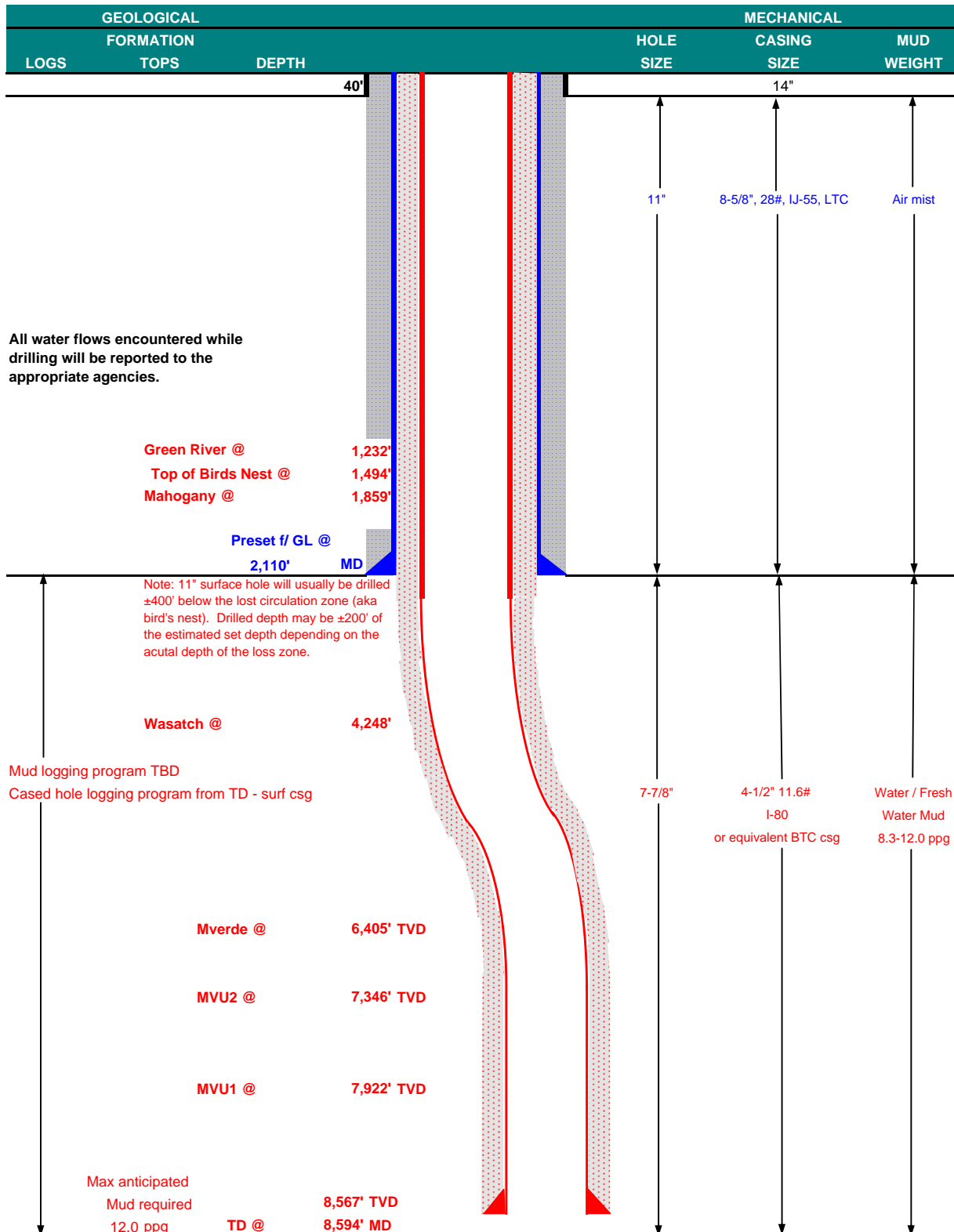
10. **Other Information:**

*Please refer to the attached Drilling Program.*



## KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP					DATE	December 29, 2010	
WELL NAME	BONANZA 1023-6K2CS					TD	8,567'	TVD 8,594' MD
FIELD	Natural Buttes		COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION 5,219'	
SURFACE LOCATION	NESW	1888 FSL	1720 FWL	Sec 6	T 10S	R 23E	Lot 3	
	Latitude: 39.975857		Longitude: -109.372675			NAD 83		
BTM HOLE LOCATION	NESW	2165 FSL	1485 FWL	Sec 6	T 10S	R 23E	Lot 4	
	Latitude: 39.976613		Longitude: -109.373510			NAD 83		
OBJECTIVE ZONE(S)	Wasatch/Mesaverde							
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BLM (Surface), UDOGM Tri-County Health Dept.							





## KERR-McGEE OIL & GAS ONSHORE LP

### DRILLING PROGRAM

#### CASING PROGRAM

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS		
						BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'				3,390	1,880	348,000
SURFACE	8-5/8"	0 to 2,110	28.00	IJ-55	LTC	0.98	1.90	5.83
						7,780	6,350	278,000
PRODUCTION	4-1/2"	0 to 8,594	11.60	I-80	BTC	2.25	1.19	3.20

\*Burst on surface casing is controlled by fracture gradient as shoe with gas gradient above.

D.F. = 2.55

1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))

2) MASP (Prod Casing) = Pore Pressure at TD - (0.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 12.0 ppg)

0.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoys.Fact. of water)

**MASP 3,364 psi**

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

(Burst Assumptions: TD = 12.0 ppg)

0.61 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing\*Buoys.Fact. of water)

**MABHP 5,248 psi**

#### CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
			+ 0.25 pps flocele				
Option 1							
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
SURFACE			<b>NOTE: If well will circulate water to surface, option 2 will be utilized</b>				
Option 2	LEAD	1,610'	65/35 Poz + 6% Gel + 10 pps gilsonite	150	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	3,744'	Premium Lite II +0.25 pps	270	10%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	4,850'	50/50 Poz/G + 10% salt + 2% gel	940	10%	14.30	1.31
			+ 0.1% R-3				

\*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

\*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

#### FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

#### ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER:

Emile Goodwin / Perry Daughtrey

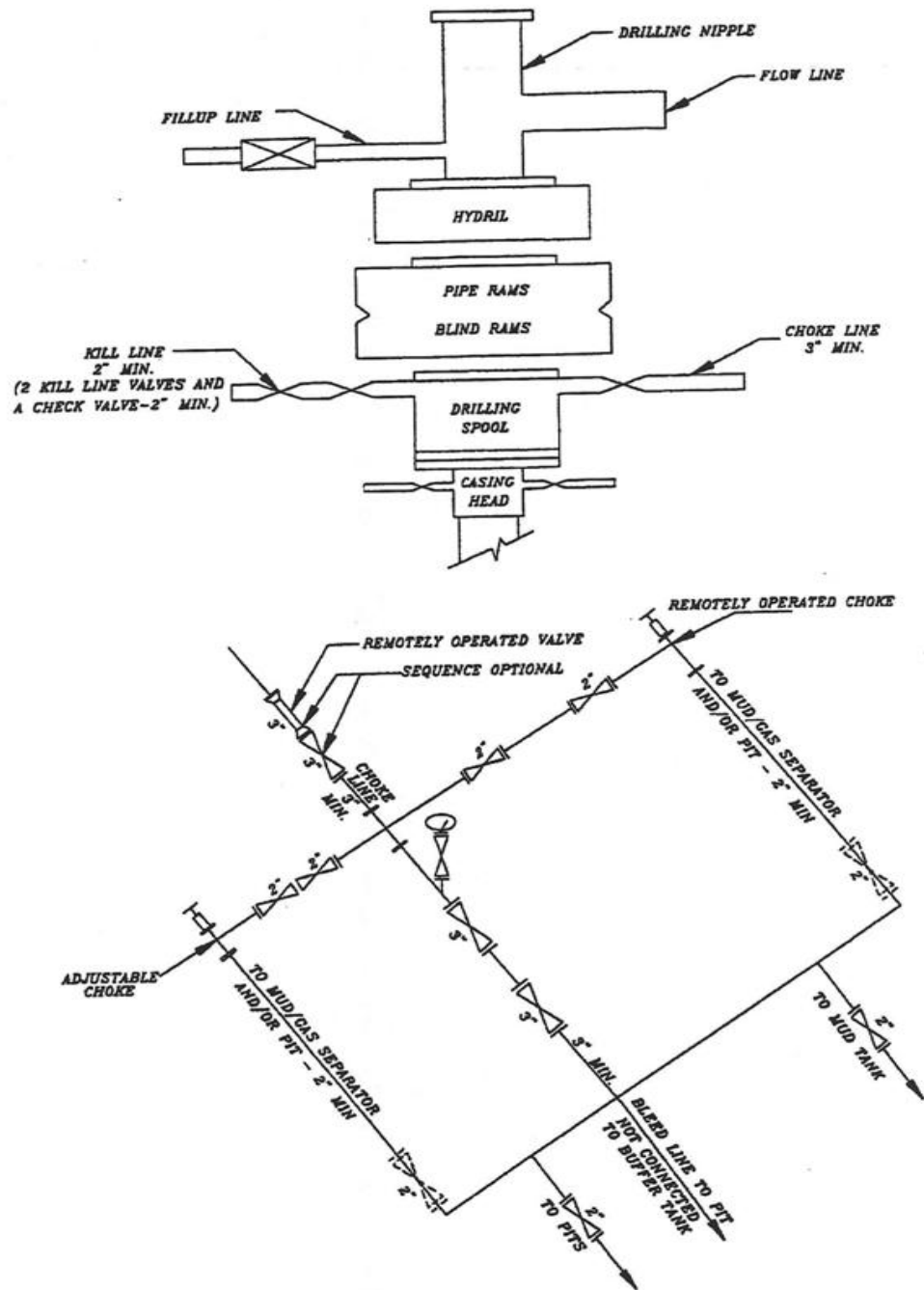
DATE:

DRILLING SUPERINTENDENT:

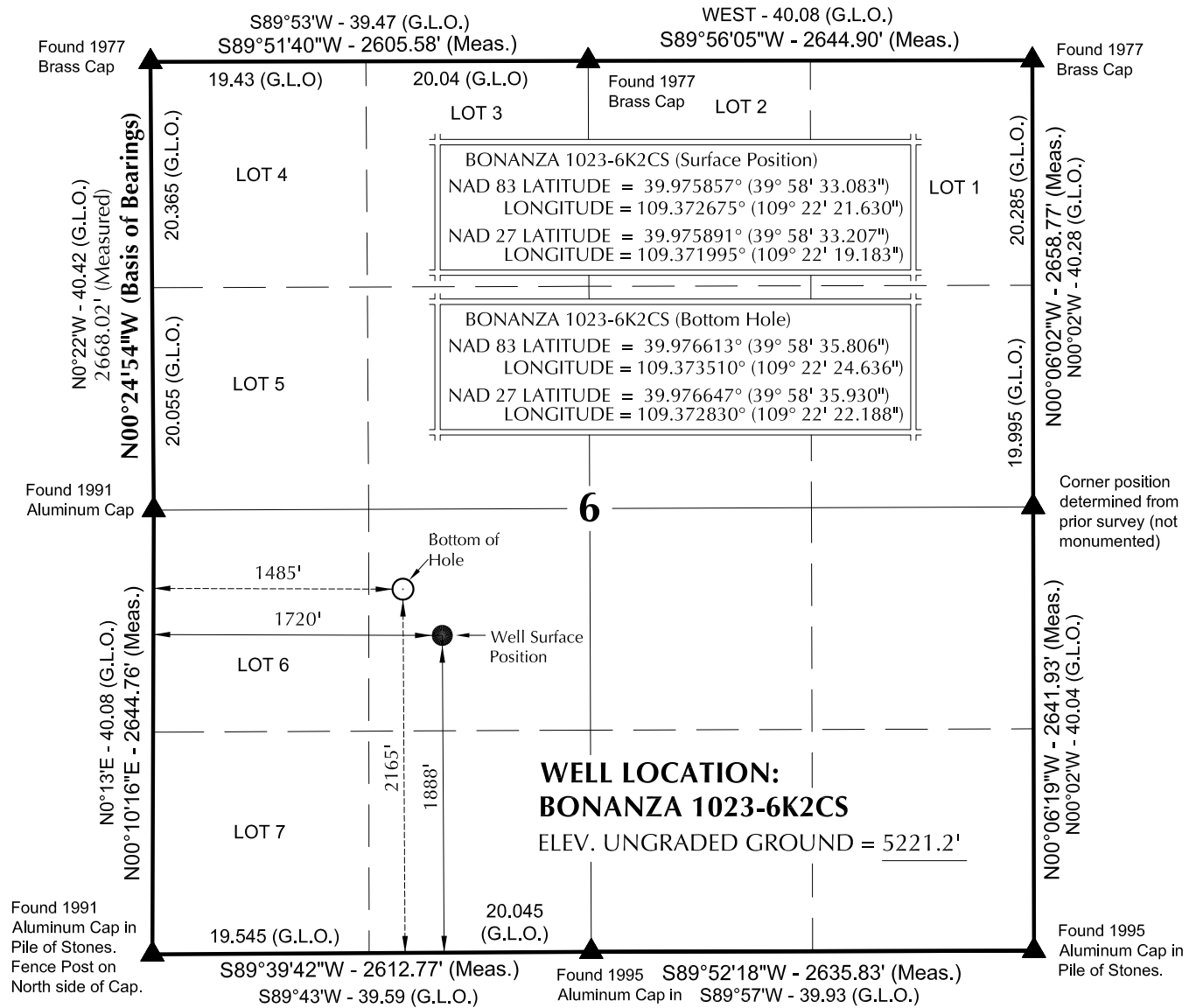
John Merkel / Lovel Young

DATE:

EXHIBIT A  
BONANZA 1023-6K2CS

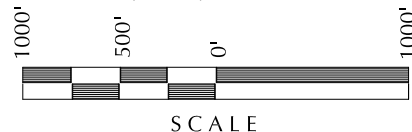


SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

**T10S, R23E, S.L.B.&M.****NOTES:**

▲ = Section Corners Located

- Well footages are measured at right angles to the Section Lines.
- G.L.O. distances are shown in feet or chains.  
1 chain = 66 feet.
- The Bottom of hole bears N40°24'02"W 361.58' from the Surface Position.
- Bearings are based on Global Positioning Satellite observations.
- Basis of elevation is Tri-Sta "Two Water" located in the NW  $\frac{1}{4}$  of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.

**SURVEYOR'S CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

John R. Laughlin  
PROFESSIONAL LAND SURVEYOR  
REGISTRATION NO. 6028691  
STATE OF UTAH

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street - Denver, Colorado 80202

**WELL PAD: BONANZA 1023-6K**

**BONANZA 1023-6K2CS**  
**WELL PLAT**

2165' FSL, 1485' FWL (Bottom Hole)  
NE  $\frac{1}{4}$  SW  $\frac{1}{4}$  OF SECTION 6, T10S, R23E,  
S.L.B.&M., UTAH COUNTY, UTAH.



**609 CONSULTING, LLC**  
371 Coffeen Avenue  
Sheridan WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

**TIMBERLINE**

(435) 789-1365

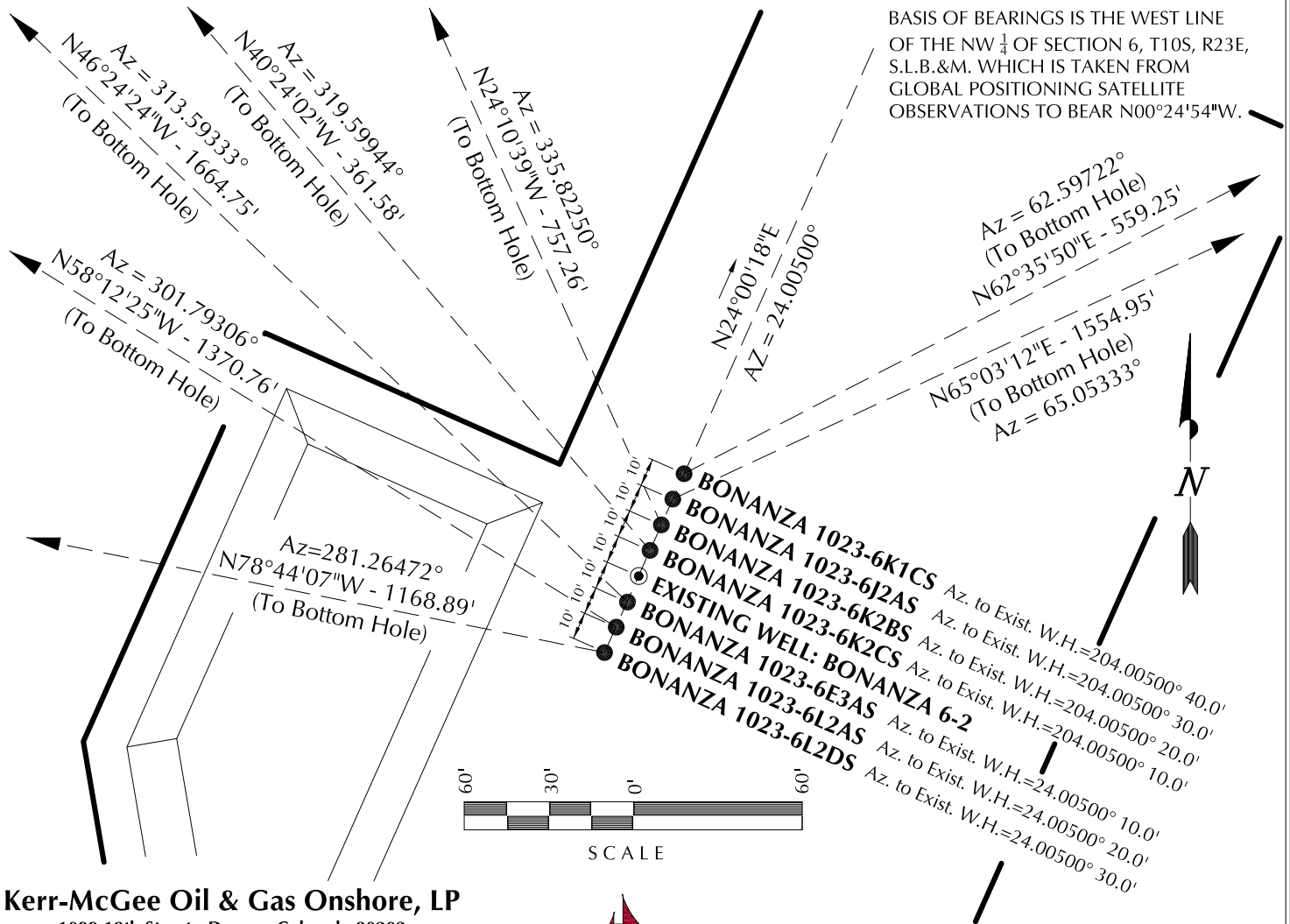
ENGINEERING & LAND SURVEYING, INC.  
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 03-08-10	SURVEYED BY: D.J.S.	SHEET NO: <b>4</b> 4 OF 19
DATE DRAWN: 03-10-10	DRAWN BY: K.H.G.	
SCALE: 1" = 1000'	Date Last Revised: 06-03-10 E.M.S.	

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27		FOOTAGES	NAD83		NAD27		FOOTAGES
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	
BONANZA 1023-6K1CS	39°58'33.354"	109°22'21.473"	39°58'33.477"	109°22'19.026"	1915' FSL	39°58'35.892"	109°22'15.094"	39°58'36.015"	109°22'12.647"	2170' FSL
BONANZA 1023-6J2AS	39.975932°	109.372632°	39.975966°	109.371952°	1732' FWL	39.976637°	109.370859°	39.976671°	109.370180°	2228' FWL
BONANZA 1023-6J2AS	39°58'33.264"	109°22'21.526"	39°58'33.387"	109°22'19.078"	1907' FSL	39°58'39.729"	109°22'03.411"	39°58'39.852"	109°22'00.964"	2556' FSL
BONANZA 1023-6J2AS	39.975907°	109.372646°	39.975941°	109.371966°	1728' FWL	39.977703°	109.367614°	39.977737°	109.366935°	2100' FEL
BONANZA 1023-6K2BS	39°58'33.173"	109°22'21.578"	39°58'33.297"	109°22'19.130"	1897' FSL	39°58'40.002"	109°22'25.552"	39°58'40.125"	109°22'23.104"	2590' FSL
BONANZA 1023-6K2BS	39.975882°	109.372661°	39.975916°	109.371981°	1724' FWL	39.977778°	109.373764°	39.977813°	109.373084°	1412' FWL
BONANZA 1023-6K2CS	39°58'33.083"	109°22'21.630"	39°58'33.207"	109°22'19.183"	1888' FSL	39°58'35.806"	109°22'24.636"	39°58'35.930"	109°22'22.188"	2165' FSL
BONANZA 1023-6K2CS	39.975857°	109.372675°	39.975891°	109.371995°	1720' FWL	39.976613°	109.373510°	39.976647°	109.372830°	1485' FWL
BONANZA 1023-6E3AS	39°58'32.902"	109°22'21.734"	39°58'33.025"	109°22'19.286"	1870' FSL	39°58'44.254"	109°22'37.203"	39°58'44.378"	109°22'34.754"	2286' FNL
BONANZA 1023-6E3AS	39.975806°	109.372704°	39.975840°	109.372024°	1712' FWL	39.978960°	109.377001°	39.978994°	109.376321°	507' FWL
BONANZA 1023-6L2AS	39°58'32.813"	109°22'21.785"	39°58'32.936"	109°22'19.337"	1861' FSL	39°58'39.960"	109°22'36.738"	39°58'40.083"	109°22'34.289"	2590' FSL
BONANZA 1023-6L2AS	39.975781°	109.372718°	39.975816°	109.372038°	1708' FWL	39.977767°	109.376872°	39.977801°	109.376192°	541' FWL
BONANZA 1023-6L2DS	39°58'32.723"	109°22'21.839"	39°58'32.847"	109°22'19.392"	1852' FSL	39°58'34.991"	109°22'36.558"	39°58'35.114"	109°22'34.110"	2087' FSL
BONANZA 1023-6L2DS	39.975757°	109.372733°	39.975791°	109.372053°	1704' FWL	39.976386°	109.376822°	39.976421°	109.376142°	557' FWL
BONANZA 6-2	39°58'32.993"	109°22'21.682"	39°58'33.116"	109°22'19.234"	1879' FSL					
BONANZA 6-2	39.975831°	109.372689°	39.975866°	109.372010°	1716' FWL					

## RELATIVE COORDINATES - From Surface Position to Bottom Hole

WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST
BONANZA 1023-6K1CS	257.4'	496.5'	BONANZA 1023-6J2AS	655.8'	1409.9'	BONANZA 1023-6K2BS	690.8'	-310.1'	BONANZA 1023-6K2CS	275.4'	-234.4'
WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST			
BONANZA 1023-6E3AS	1147.9'	-1205.7'	BONANZA 1023-6L2AS	722.2'	-1165.1'	BONANZA 1023-6L2DS	228.3'	-1146.4'			



**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street - Denver, Colorado 80202

**WELL PAD - BONANZA 1023-6K****WELL PAD INTERFERENCE PLAT**

WELLS - BONANZA 1023-6K1CS, BONANZA 1023-6J2AS,  
BONANZA 1023-6K2BS, BONANZA 1023-6K2CS,  
BONANZA 1023-6E3AS, BONANZA 1023-6L2AS &  
BONANZA 1023-6L2DS  
LOCATED IN SECTION 6, T10S, R23E,  
S.L.B.&M., UTAH COUNTY, UTAH.



**CONSULTING, LLC**  
371 Coffeen Avenue  
Sheridan WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

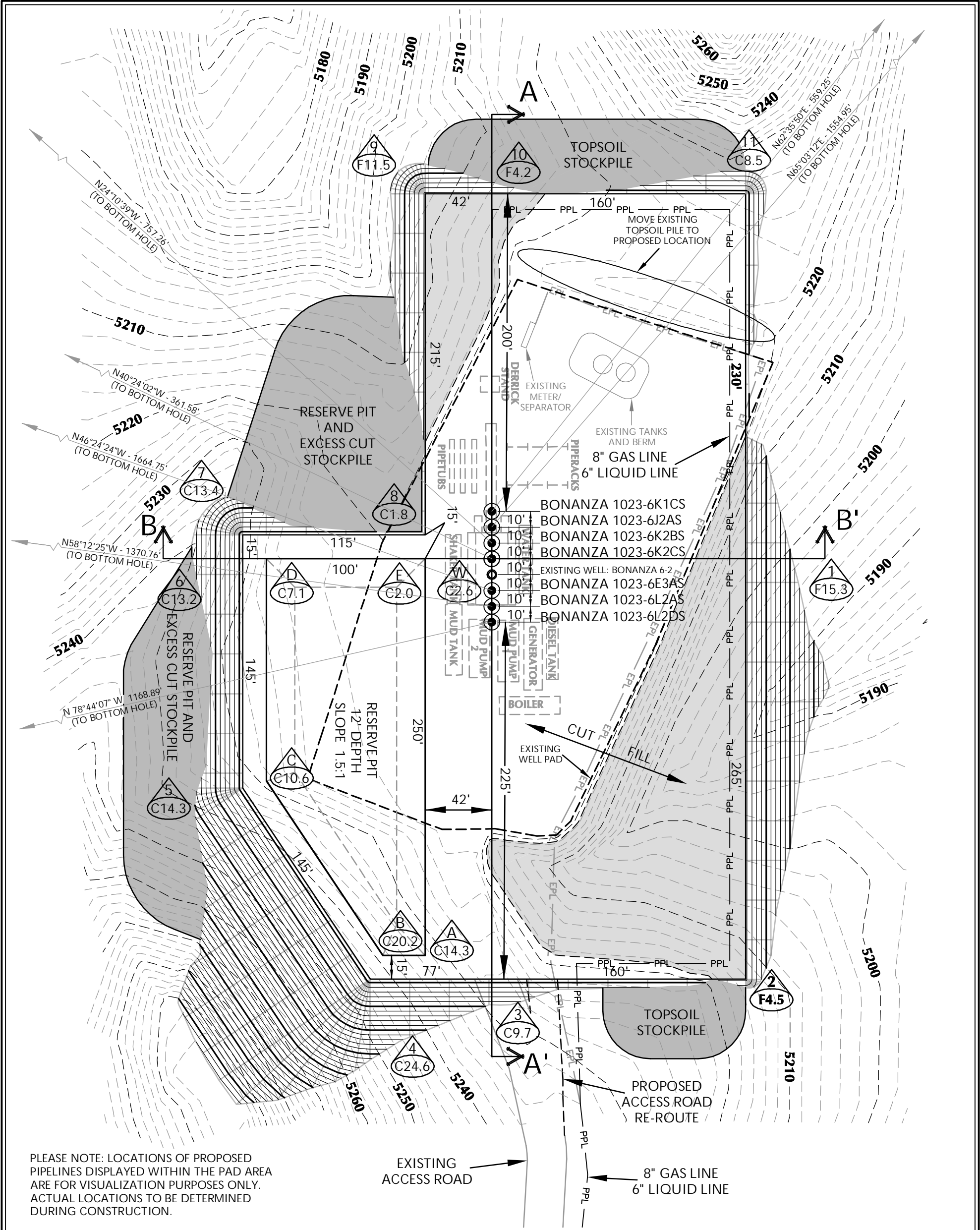
**TIMBERLINE**

(435) 789-1365

ENGINEERING & LAND SURVEYING, INC.  
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 03-08-10	SURVEYED BY: D.J.S.	SHEET NO: <b>8</b> 8 OF 19
DATE DRAWN: 03-10-10	DRAWN BY: K.H.G.	
SCALE: 1" = 60'	Date Last Revised: 06-03-10 E.M.S.	





WELL PAD - BONANZA 1023-6K DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 5221.2'  
FINISHED GRADE ELEVATION = 5218.6'  
CUT SLOPES = 1.5:1  
FILL SLOPES = 1.5:1  
TOTAL WELL PAD AREA = 3.84 ACRES  
TOTAL DAMAGE AREA = 6.18 ACRES  
SHRINKAGE FACTOR = 1.10  
SWELL FACTOR = 1.00

Kerr-McGee Oil & Gas Onshore, LP  
1099 18th Street - Denver, Colorado 80202

WELL PAD - BONANZA 1023-6K

WELL PAD - LOCATION LAYOUT  
BONANZA 1023-6K1CS, BONANZA 1023-6J2AS,  
BONANZA 1023-6K2BS, BONANZA 1023-6K2CS,  
BONANZA 1023-6E3AS, BONANZA 1023-6L2AS &  
BONANZA 1023-6L2DS  
LOCATED IN SECTION 6, T10S, R23E,  
S.L.B.&M., UINTAH COUNTY, UTAH



CONSULTING, LLC  
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Sheridan, WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

WELL PAD QUANTITIES

TOTAL CUT FOR WELL PAD = 20,745 C.Y.  
TOTAL FILL FOR WELL PAD = 18,389 C.Y.  
TOPSOIL @ 6" DEPTH = 2,012 C.Y.  
EXCESS MATERIAL = 2,356 C.Y.

RESERVE PIT QUANTITIES

TOTAL CUT FOR RESERVE PIT  
+/- 6,910 CY  
RESERVE PIT CAPACITY (2' OF FREEBOARD)  
+/- 26,100 BARRELS

**TIMBERLINE**  
ENGINEERING & LAND SURVEYING, INC.  
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

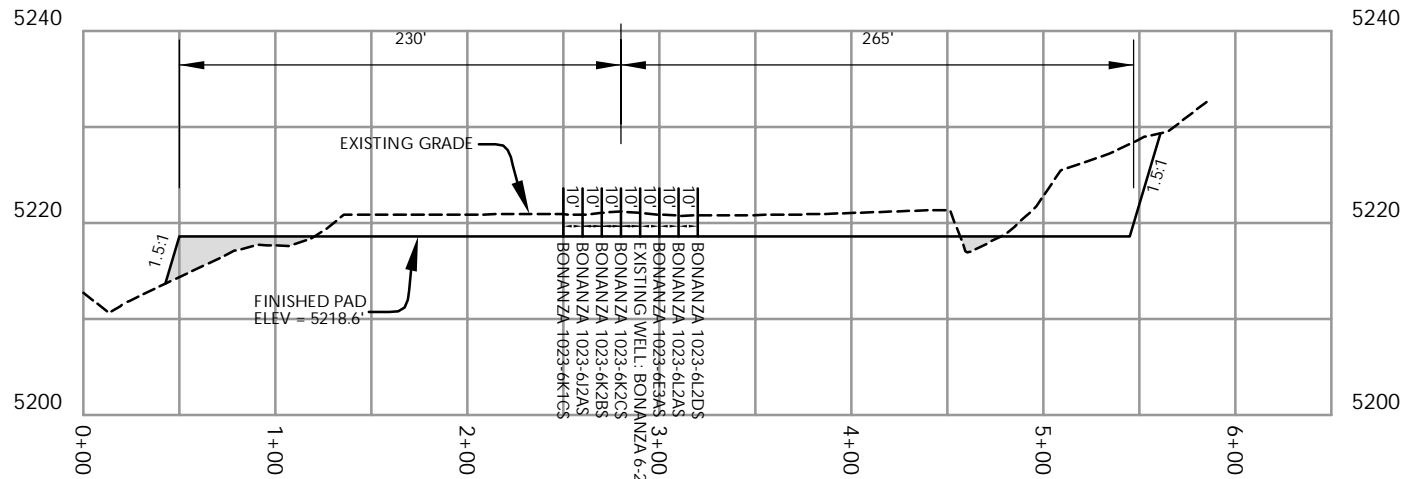
WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)
- PPL - PROPOSED PIPELINE
- EPL - EXISTING PIPELINE

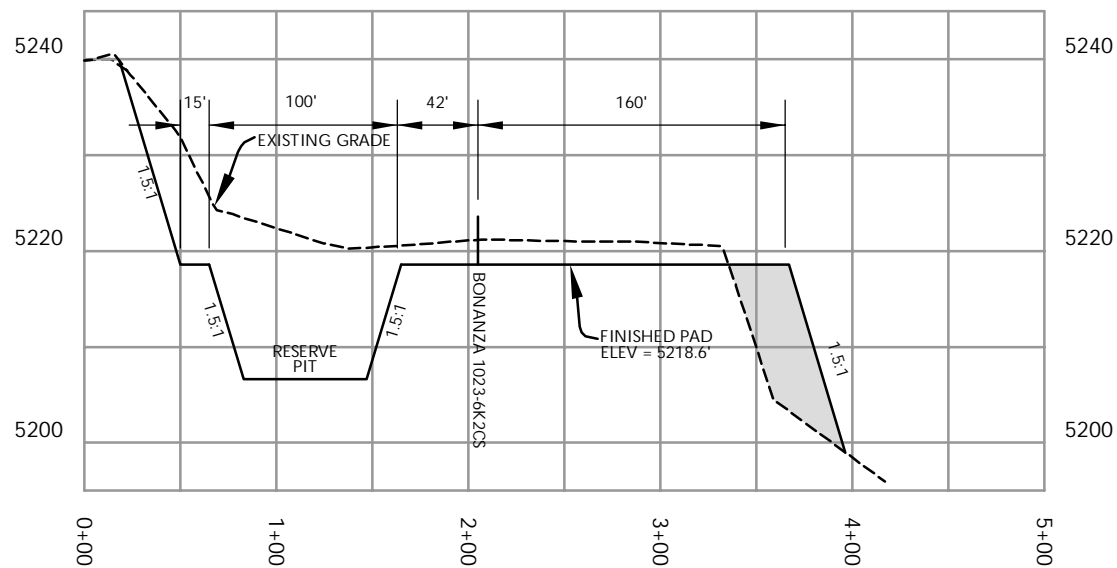


HORIZONTAL 0 30 60 1" = 60'  
2' CONTOURS

Scale: 1"=60' Date: 4/7/10 SHEET NO:  
REVISED: JID 8/6/10 9 9 OF 19



**CROSS SECTION A-A'**



**CROSS SECTION B-B'**

NOTE: CROSS SECTION B-B' DEPICTS  
MAXIMUM RESERVE PIT DEPTH.

Kerr-McGee Oil & Gas Onshore, LP  
1099 18th Street - Denver, Colorado 80202

**WELL PAD - BONANZA 1023-6K**

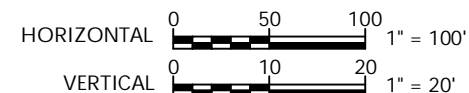
WELL PAD - CROSS SECTIONS  
BONANZA 1023-6K1CS, BONANZA 1023-6J2AS,  
BONANZA 1023-6K2BS, BONANZA 1023-6K2CS,  
BONANZA 1023-6E3AS, BONANZA 1023-6L2AS &  
BONANZA 1023-6L2DS  
LOCATED IN SECTION 6, T10S, R23E,  
S.L.B.&M., UTAH COUNTY, UTAH



CONSULTING, LLC  
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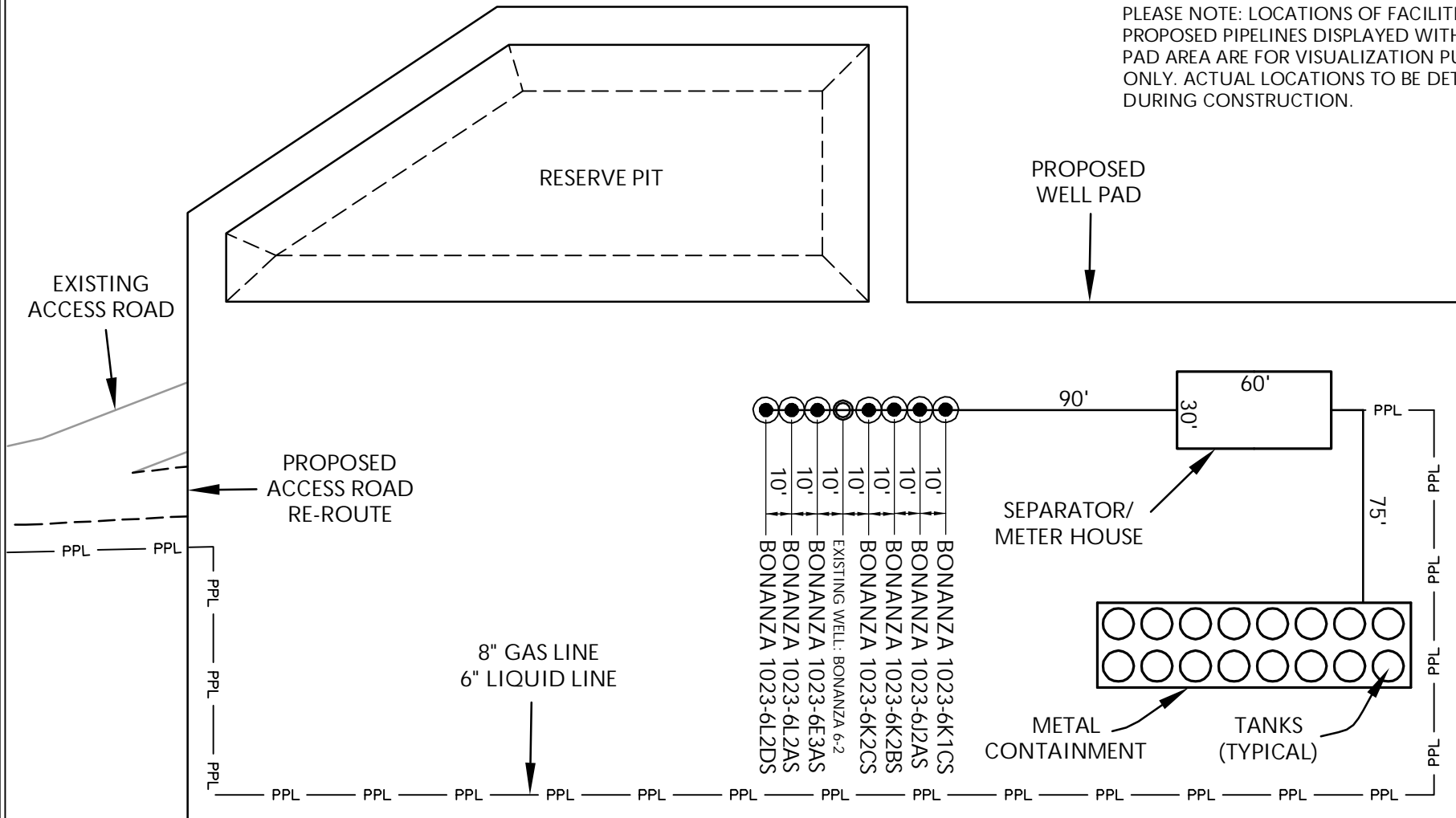
**TIMBERLINE**  
**ENGINEERING & LAND SURVEYING, INC.**  
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365



Scale: 1"=100'	Date: 4/7/10	SHEET NO: <b>10</b> 10 OF 19
REVISED:	JID 8/6/10	

PLEASE NOTE: LOCATIONS OF FACILITIES AND PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.



Kerr-McGee Oil & Gas Onshore, LP  
1099 18th Street - Denver, Colorado 80202

### WELL PAD - BONANZA 1023-6K

WELL PAD - FACILITIES DIAGRAM  
BONANZA 1023-6K1CS, BONANZA 1023-6J2AS,  
BONANZA 1023-6K2BS, BONANZA 1023-6K2CS,  
BONANZA 1023-6E3AS, BONANZA 1023-6L2AS &  
BONANZA 1023-6L2DS  
LOCATED IN SECTION 6, T10S, R23E,  
S.L.B.&M., UINAH COUNTY, UTAH



CONSULTING, LLC  
371 Coffeen Avenue  
Sheridan, WY 82801  
Phone 307-674-0609  
Fax 307-674-0182

### WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PPL — PROPOSED PIPELINE
- EPL — EXISTING PIPELINE



HORIZONTAL 0 30' 60' 1" = 60'

**TIMBERLINE**  
ENGINEERING & LAND SURVEYING, INC.  
209 NORTH 300 WEST - VERNAL, UTAH 84078

(435) 789-1365

Scale: 1"=60'

Date: 4/7/10

SHEET NO:

REVISED:

JID  
8/6/10

**11** 11 OF 19



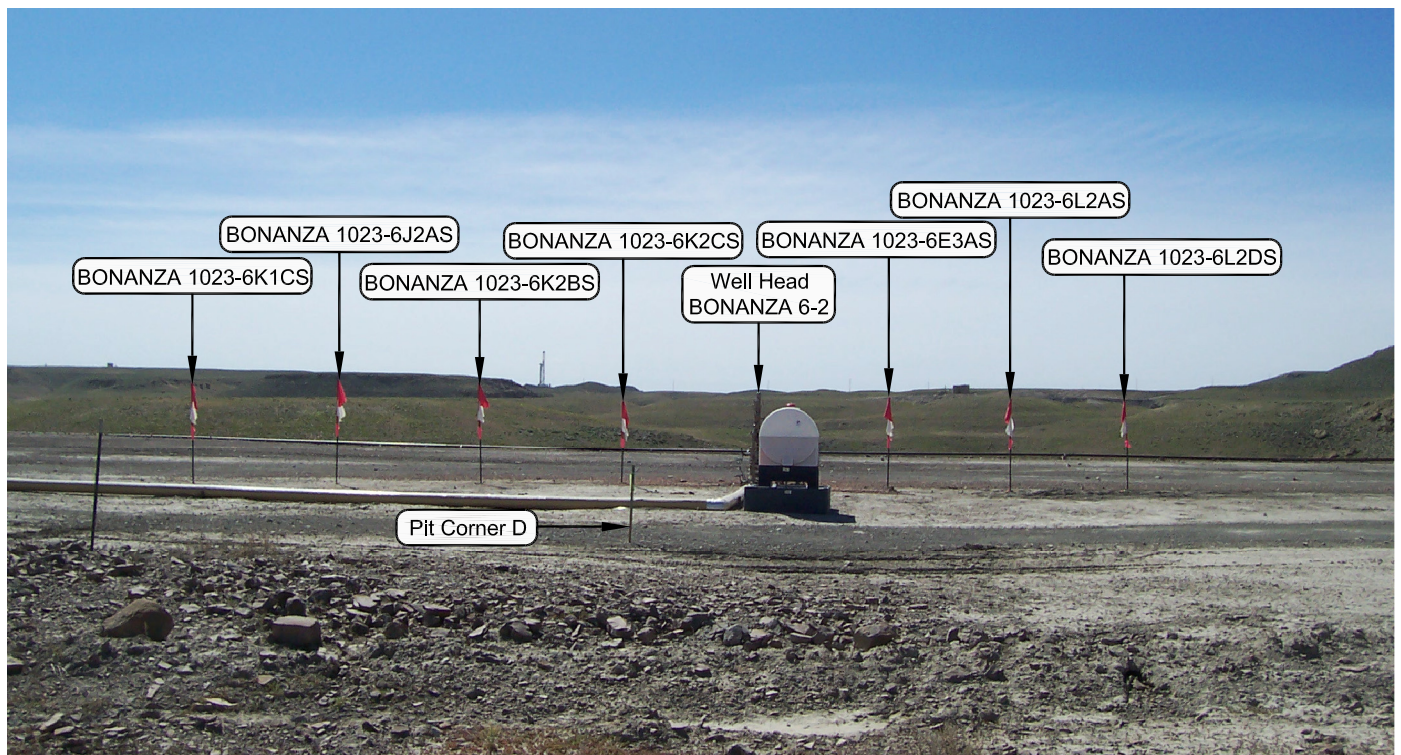


PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKES

CAMERA ANGLE: SOUTHEASTERLY



PHOTO VIEW: FROM BEGINNING OF PROPOSED ROAD

CAMERA ANGLE: NORTHEASTERLY

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street - Denver, Colorado 80202

**WELL PAD - BONANZA 1023-6K**

LOCATION PHOTOS  
BONANZA 1023-6K1CS, BONANZA 1023-6J2AS,  
BONANZA 1023-6K2BS, BONANZA 1023-6K2CS,  
BONANZA 1023-6E3AS, BONANZA 1023-6L2AS &  
BONANZA 1023-6L2DS  
LOCATED IN SECTION 6, T10S, R23E,  
S.L.B.&M., UINTAH COUNTY, UTAH.



**CONSULTING, LLC**  
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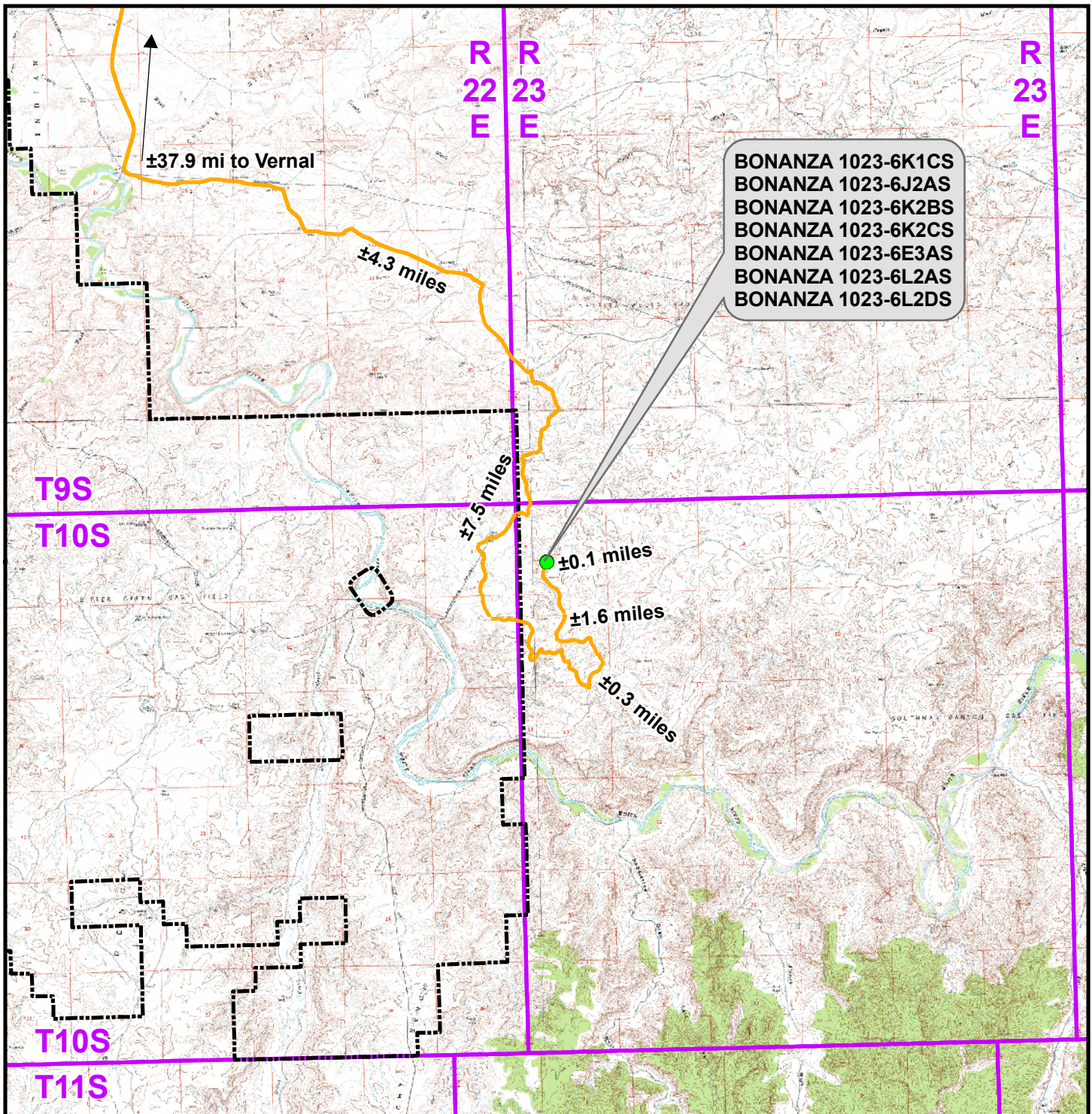
**TIMBERLINE**

(435) 789-1365

ENGINEERING & LAND SURVEYING, INC.  
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE PHOTOS TAKEN: 03-08-10	PHOTOS TAKEN BY: D.J.S.	SHEET NO:  <b>12</b>  12 OF 19
DATE DRAWN: 03-10-10	DRAWN BY: K.H.G.	
Date Last Revised: 06-03-10 E.M.S.		





### Legend

- Proposed Well Location
- Natural Buttes Unit Boundary
- Access Route - Proposed

Distance From Well Pad - BONANZA 1023-6K To Unit Boundary:  $\pm 1,704$ ft

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street, Denver, Colorado 80202

### WELL PAD - BONANZA 1023-6K

TOPO A  
BONANZA 1023-6K1CS, BONANZA 1023-6J2AS,  
BONANZA 1023-6K2BS, BONANZA 1023-6K2CS,  
BONANZA 1023-6E3AS, BONANZA 1023-6L2AS &  
BONANZA 1023-6L2DS  
LOCATED IN SECTION 6, T10S, R23E  
S.L.B.&M., UTAH COUNTY, UTAH

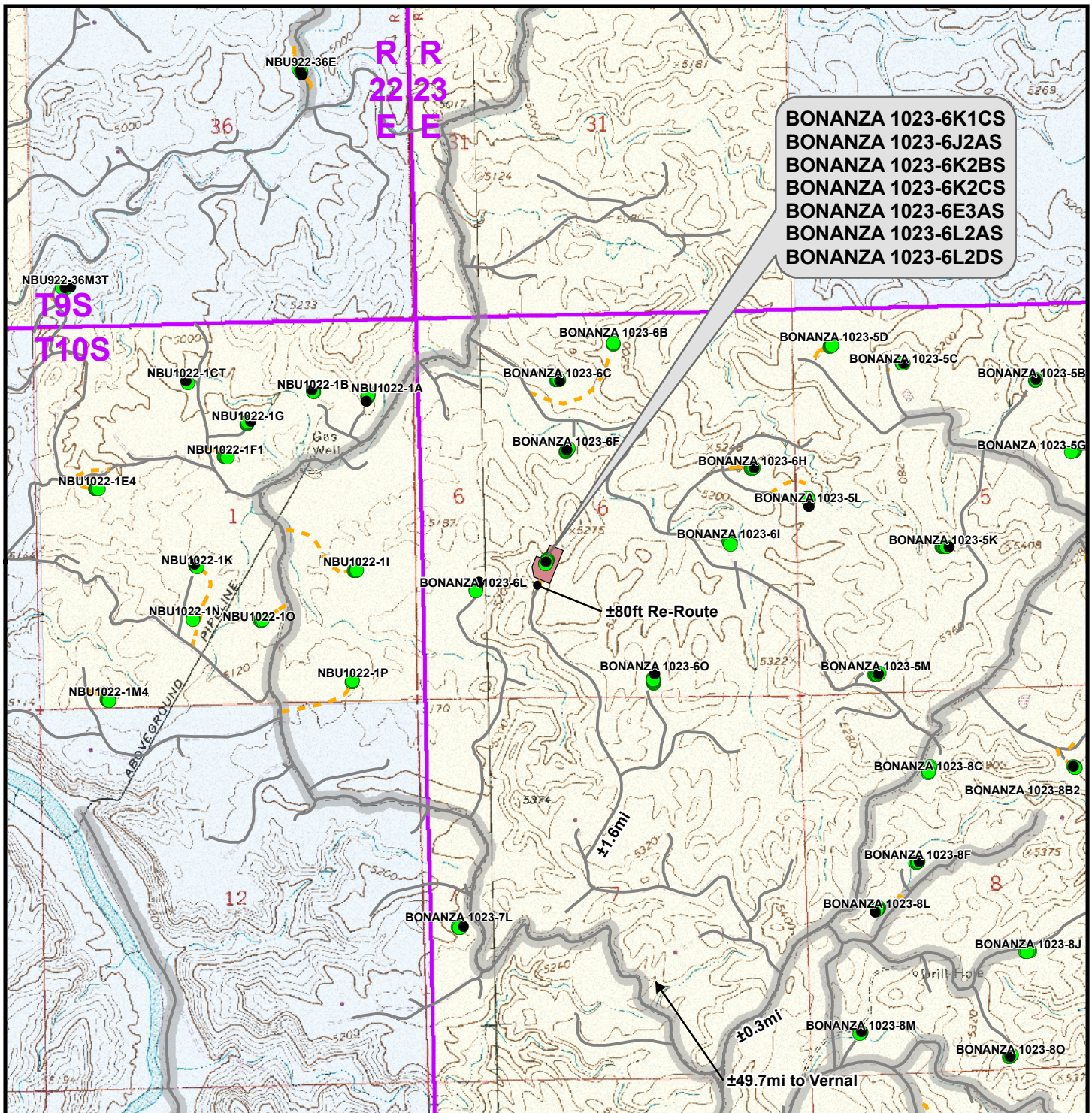


Scale: 1:100,000	NAD83 USP Central
Drawn: TL	Date: 14 Apr 2010
Revised: JID	Date: 6 Aug 2010

Sheet No:

**13** 13 of 19





## Legend

- |  |  |   |  |  |  |
|--|--|---|--|--|--|
| <span style="color: green;">●</span> Well - Proposed | <span style="background-color: #c00000; color: white; padding: 2px;"> </span> Well Pad | <span style="color: orange;">---</span> Road - Proposed   | <span style="background-color: #cccccc; border: 1px solid black; padding: 2px;"> </span> County Road | <span style="background-color: #ffff00; border: 1px solid black; padding: 2px;"> </span> Bureau of Land Management | <span style="background-color: #add8e6; border: 1px solid black; padding: 2px;"> </span> State |
| <span style="color: black;">●</span> Well - Existing | <span style="color: black;">---</span> Road - Existing                                 | <span style="background-color: #ffcccc; border: 1px solid black; padding: 2px;"> </span> Indian Reservation | <span style="border: 1px solid black; padding: 2px;"> </span> Private                                |  |  |

Total Proposed Road Re-Route Length: ±80ft

**Kerr-McGee Oil & Gas Onshore, LP**  
1099 18th Street, Denver, Colorado 80202

## WELL PAD - BONANZA 1023-6K

TOPO B  
BONANZA 1023-6K1CS, BONANZA 1023-6J2AS,  
BONANZA 1023-6K2BS, BONANZA 1023-6K2CS,  
BONANZA 1023-6E3AS, BONANZA 1023-6L2AS &  
BONANZA 1023-6L2DS  
LOCATED IN SECTION 6, T10S, R23E  
S.L.B.&M., UTAH COUNTY, UTAH



Scale: 1" = 2,000ft	NAD83 USP Central
Drawn: TL	Date: 14 Apr 2010
Revised: JID	Date: 6 Aug 2010

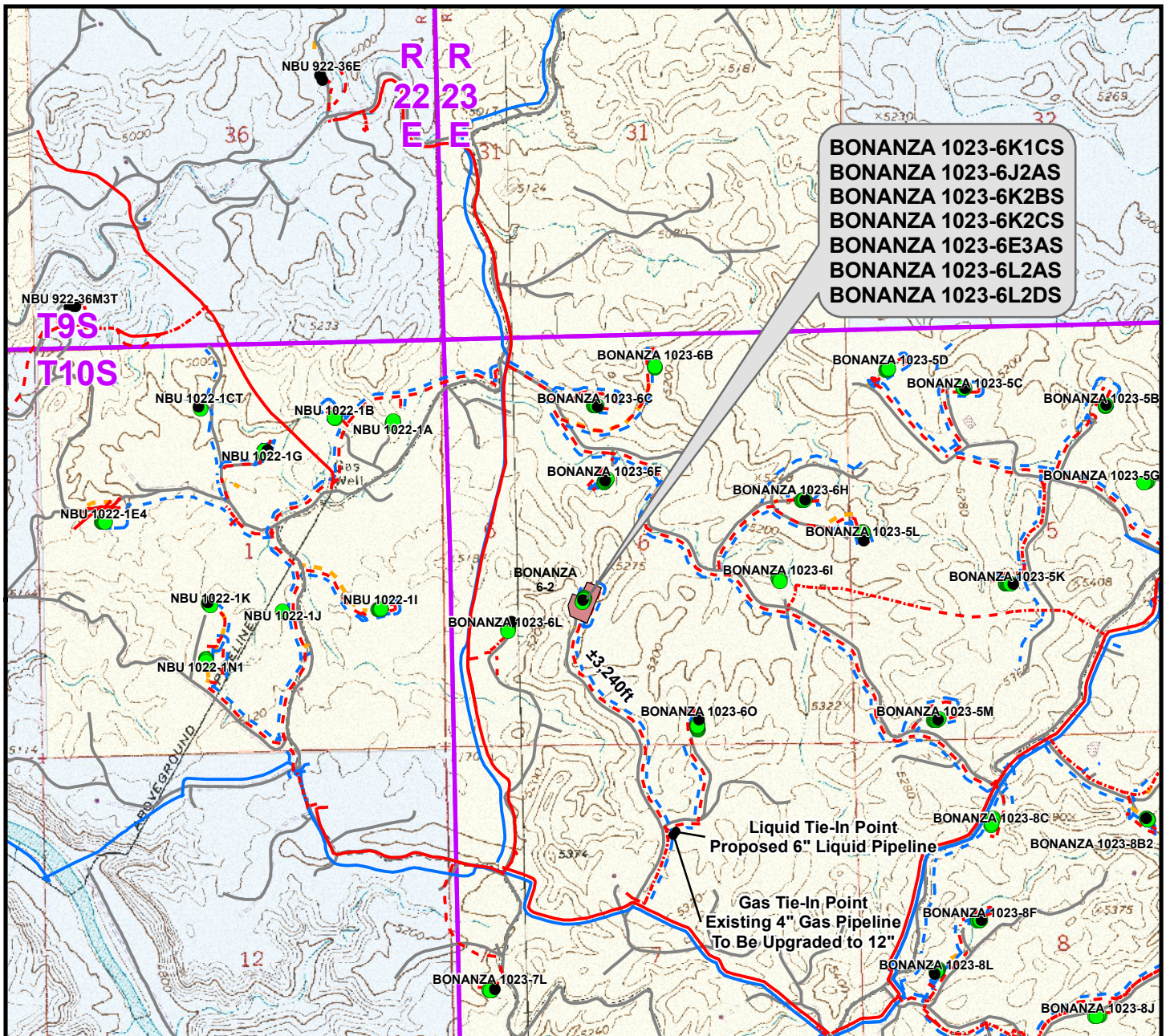
Sheet No:

**14** 14 of 19



Sheet No:  
**15**  
15 of 19





Proposed Liquid Pipeline	Length
Proposed 6" (Meter House to Edge of Pad)	±820ft
Proposed 6" (Edge of Pad to 60 Intersection)	±3,240ft
<b>TOTAL PROPOSED LIQUID PIPELINE =</b>	<b>±4,060ft</b>

Proposed Gas Pipeline	Length
Proposed 8" (Meter House to Edge of Pad)	±820ft
Proposed 8" (Edge of Pad to 60 Intersection)	±3,240ft
<b>TOTAL PROPOSED GAS PIPELINE =</b>	<b>±4,060ft</b>

### Legend

● Well - Proposed	- - - Gas Pipeline - Proposed	- - - Liquid Pipeline - Proposed	- - - Road - Proposed	Bureau of Land Management
● Well - Existing	- - - Gas Pipeline - To Be Upgraded	- - - Liquid Pipeline - To Be Upgraded	- - - Road - Existing	Indian Reservation
Well Pad	- - - Gas Pipeline - Existing	- - - Liquid Pipeline - Existing		State
				Private

**Kerr-McGee Oil & Gas Onshore, LP**  
 1099 18th Street, Denver, Colorado 80202

### WELL PAD - BONANZA 1023-6K

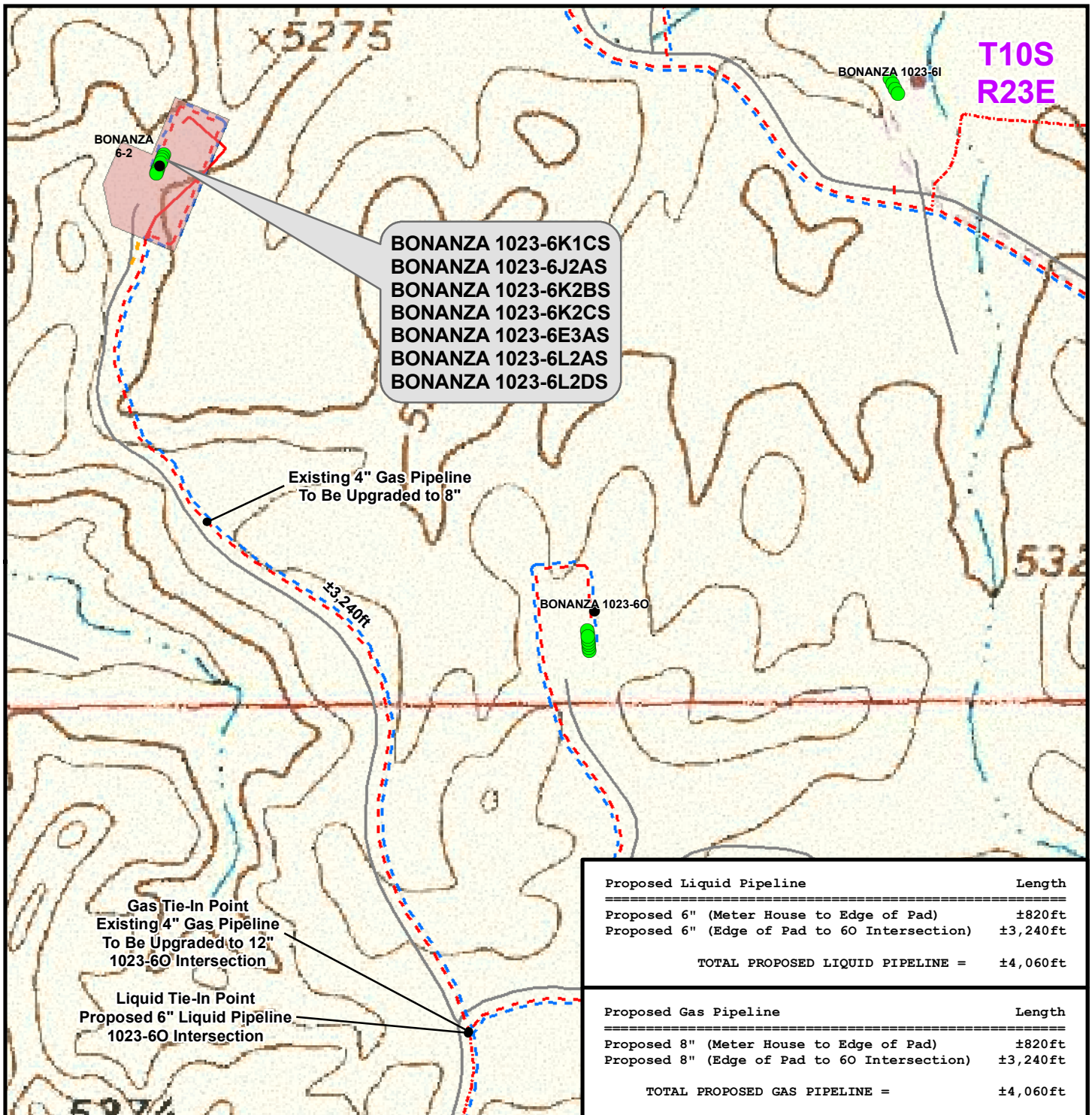
TOPO D  
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 BONANZA 1023-6K2BS, BONANZA 1023-6K2CS,  
 BONANZA 1023-6E3AS, BONANZA 1023-6L2AS &  
 BONANZA 1023-6L2DS  
 LOCATED IN SECTION 6, T10S, R23E  
 S.L.B.&M., UTAH COUNTY, UTAH



Scale: 1" = 2,000ft	NAD83 USP Central
Drawn: TL	Date: 14 Apr 2010
Revised: CPS	Date: 15 Oct 2010

Sheet No:  
**16** 16 of 19





### Legend

- Well - Proposed    
 --- Gas Pipeline - Proposed    
 --- Liquid Pipeline - Proposed    
 --- Road - Proposed    
  Bureau of Land Management
- Well - Existing    
 --- Gas Pipeline - To Be Upgraded    
 --- Liquid Pipeline - To Be Upgraded    
 --- Road - Existing    
  Indian Reservation
- Well Pad    
 --- Gas Pipeline - Existing    
 --- Liquid Pipeline - Existing    
  State
- Private

**Kerr-McGee Oil & Gas Onshore, LP**  
 1099 18th Street, Denver, Colorado 80202

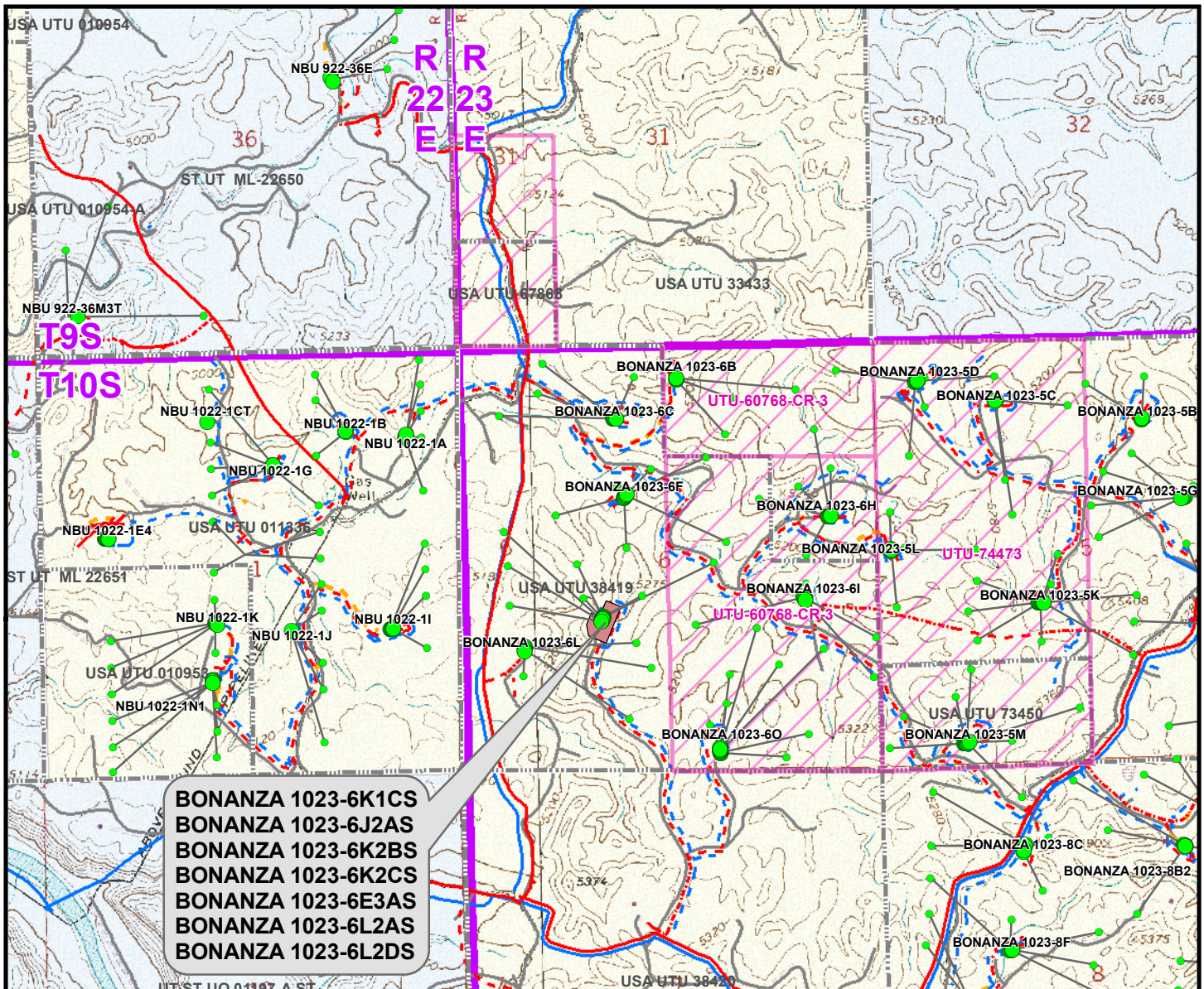
### WELL PAD - BONANZA 1023-6K

TOPO D2 (PAD & PIPELINE DETAIL)  
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 BONANZA 1023-6K2BS, BONANZA 1023-6K2CS,  
 BONANZA 1023-6E3AS, BONANZA 1023-6L2AS &  
 BONANZA 1023-6L2DS  
 LOCATED IN SECTION 6, T10S, R23E  
 S.L.B.&M., UTAH COUNTY, UTAH



Scale: 1" = 500ft	NAD83 USP Central	Sheet No:
Drawn: TL	Date: 14 Apr 2010	<b>17</b>
Revised: CPS	Date: 15 Oct 2010	17 of 19





**BONANZA 1023-6K1CS**  
**BONANZA 1023-6J2AS**  
**BONANZA 1023-6K2BS**  
**BONANZA 1023-6K2CS**  
**BONANZA 1023-6E3AS**  
**BONANZA 1023-6L2AS**  
**BONANZA 1023-6L2DS**

Proposed Well	Distance To Nearest CA Boundary
BONANZA 1023-6K1CS	370ft
BONANZA 1023-6J2AS	540ft
BONANZA 1023-6K2BS	1,184ft
BONANZA 1023-6K2CS	1,113ft
BONANZA 1023-6E3AS	2,089ft
BONANZA 1023-6L2AS	2,054ft
BONANZA 1023-6L2DS	2,041ft

Proposed Well	Distance To Nearest Lease Boundary
BONANZA 1023-6K1CS	1,754ft
BONANZA 1023-6J2AS	784ft
BONANZA 1023-6K2BS	1,412ft
BONANZA 1023-6K2CS	1,485ft
BONANZA 1023-6E3AS	507ft
BONANZA 1023-6L2AS	541ft
BONANZA 1023-6L2DS	557ft

#### Legend

<span style="color: green;">●</span> Well - Proposed	<span style="border: 1px solid black; padding: 2px;">Well Pad</span>	<span style="color: red;">---</span> Gas Pipeline - Proposed	<span style="color: blue;">---</span> Liquid Pipeline - Proposed	<span style="color: orange;">---</span> Road - Proposed	<span style="background-color: yellow;">Bureau of Land Management</span>
<span style="color: green;">○</span> Bottom Hole - Proposed	<span style="border: 1px solid black; padding: 2px;">CA Agreement</span>	<span style="color: red;">---</span> Gas Pipeline - To Be Upgraded	<span style="color: blue;">---</span> Liquid Pipeline - To Be Upgraded	<span style="color: gray;">---</span> Road - Existing	<span style="background-color: lightblue;">Indian Reservation</span>
<span style="color: gray;">---</span> Well Path	<span style="border: 1px solid black; padding: 2px;">Lease Boundary</span>	<span style="color: red;">---</span> Gas Pipeline - Existing	<span style="color: blue;">---</span> Liquid Pipeline - Existing	<span style="color: gray;">---</span> Road - Existing	<span style="background-color: lightblue;">State</span>
					<span style="background-color: white;">Private</span>

**Kerr-McGee Oil & Gas Onshore, LP**  
 1099 18th Street, Denver, Colorado 80202

#### WELL PAD - BONANZA 1023-6K

TOPO E  
 BONANZA 1023-6K1CS, BONANZA 1023-6J2AS,  
 BONANZA 1023-6K2BS, BONANZA 1023-6K2CS,  
 BONANZA 1023-6E3AS, BONANZA 1023-6L2AS &  
 BONANZA 1023-6L2DS  
 LOCATED IN SECTION 6, T10S, R23E  
 S.L.B.&M., UTAH COUNTY, UTAH



Scale: 1" = 2,000ft	NAD83 USP Central
Drawn: TL	Date: 14 Apr 2010
Revised: CPS	Date: 15 Oct 2010

Sheet No:

**18** 18 of 19

**Kerr-McGee Oil & Gas Onshore, LP  
WELL PAD – BONANZA 1023-6K  
WELLS – BONANZA 1023-6K1CS, BONANZA 1023-6J2AS,  
BONANZA 1023-6K2BS, BONANZA 1023-6K2CS,  
BONANZA 1023-6E3AS, BONANZA 1023-6L2AS &  
BONANZA 1023-6L2DS  
Section 6, T10S, R23E, S.L.B.&M.**

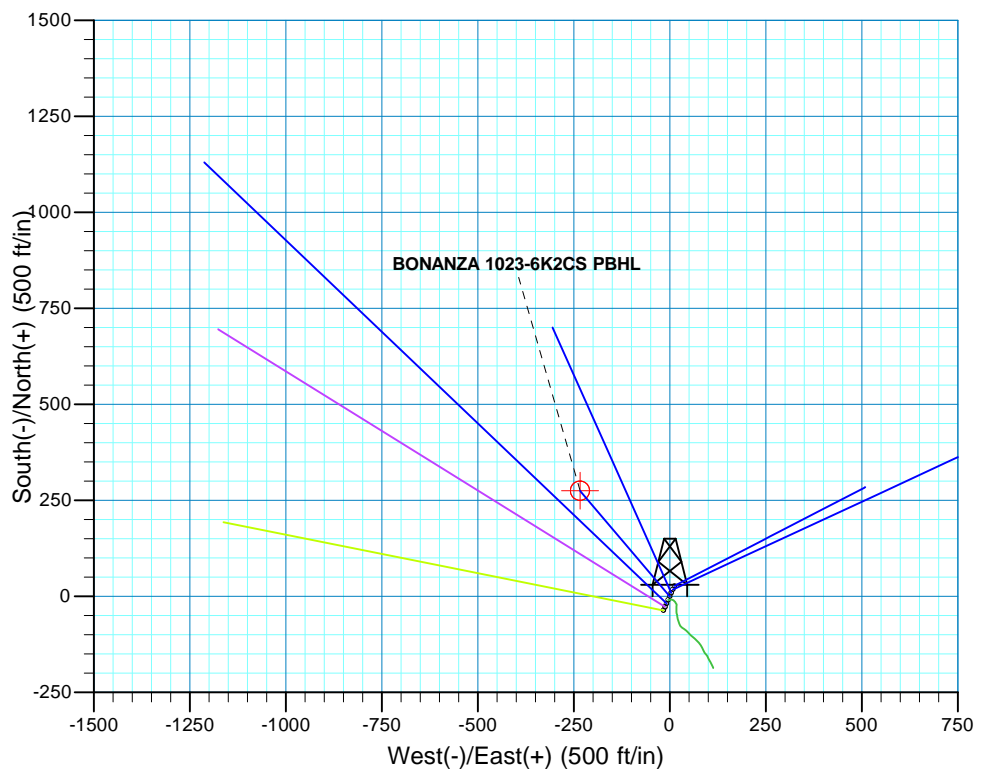
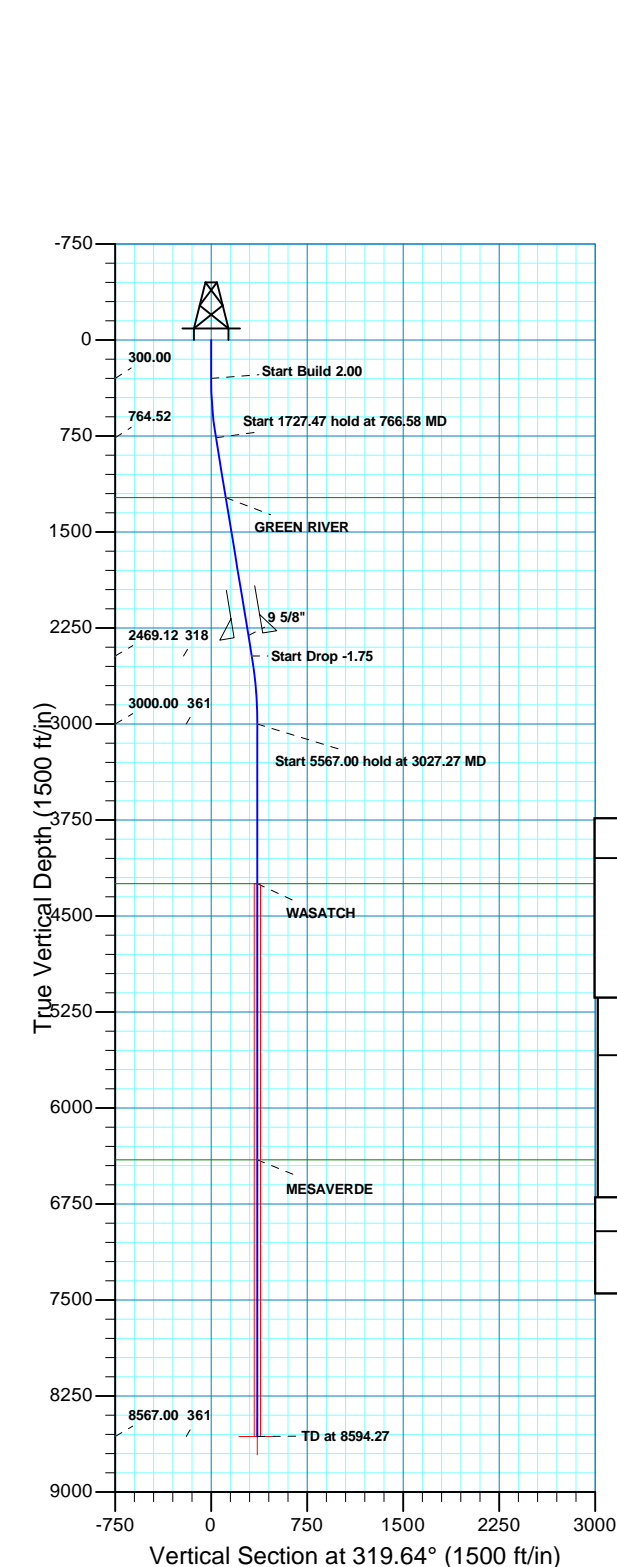
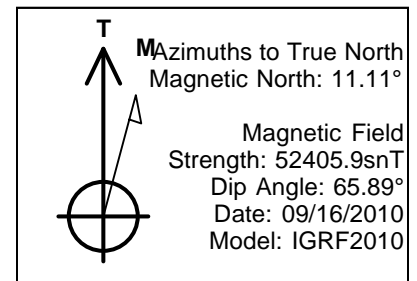
From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah proceed in an easterly then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45; exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 14.4 miles to the intersection of the Chipeta Wells Road (County B Road 3410) which road intersection is approximately 400 feet northeast of the Mountain Fuel Bridge, at the White River. Exit left and proceed in a southeasterly direction along the Chipeta Wells Road approximately 4.3 miles to the intersection of the Atchee Wash Road (County B Road 4240). Exit right and proceed in a southeasterly, then southerly direction along the Atchee Wash Road approximately 7.5 miles to the intersection of the County B Road 3420. Exit left and proceed in a northeasterly direction along the County B Road 3420 approximately 0.3 miles to a service road to the left. Exit left and proceed along said service road approximately 1.6 miles to the proposed access road. Follow the road flags in a northeasterly direction approximately 80 feet to the proposed well pad.

Total distance from Vernal, Utah to the proposed well location is approximately 51.6 miles in a southerly direction.



WELL DETAILS: BONANZA 1023-6K2CS					
GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	14521429.23	2096524.13	39° 58' 33.208 N	109° 22' 19.182 W

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL	8567.00	275.35	-233.98	14521700.26	2096285.16	39° 58' 35.929 N	109° 22' 22.188 W
- plan hits target center							
Shape							
Circle (Radius: 25.00)							



SECTION DETAILS										
	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target  

# **Kerr McGee Oil and Gas Onshore LP**

**Uintah County, UT UTM12**

**Bonanza 1023-6K Pad**

**BONANZA 1023-6K2CS**

**OH**

**Plan: PLAN #1**

## **Standard Planning Report**

**16 September, 2010**

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well BONANZA 1023-6K2CS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Project:</b>	Uintah County, UT UTM12	<b>MD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Site:</b>	Bonanza 1023-6K Pad	<b>North Reference:</b>	True
<b>Well:</b>	BONANZA 1023-6K2CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

<b>Project</b>	Uintah County, UT UTM12		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

Site						Bonanza 1023-6K Pad, SEC 6 T10S R23E											
Site Position:			Northing:			14,521,392.52 usft			Latitude:			39° 58' 32.848 N					
From:			Lat/Long			Easting:			2,096,508.54 usft			Longitude:			109° 22' 19.391 W		
Position Uncertainty:			0.00 ft			Slot Radius:			13.200 in			Grid Convergence:			1.05		

Well	BONANZA 1023-6K2CS, 1888' FSL 1720' FWL					
Well Position	+N/-S	36.42 ft	Northing:	14,521,429.24 usft	Latitude:	39° 58' 33.208 N
	+E/-W	16.25 ft	Easting:	2,096,524.13 usft	Longitude:	109° 22' 19.182 W
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,219.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	09/16/2010	11.11	65.89	52,406

<b>Design</b>	PLAN #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	319.64

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
766.58	9.33	319.64	764.52	28.89	-24.55	2.00	2.00	0.00	319.64	
2,494.04	9.33	319.64	2,469.12	242.34	-205.93	0.00	0.00	0.00	0.00	
3,027.27	0.00	0.00	3,000.00	275.35	-233.98	1.75	-1.75	0.00	180.00	
8,594.27	0.00	0.00	8,567.00	275.35	-233.98	0.00	0.00	0.00	0.00	BONANZA 1023-6K2C

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well BONANZA 1023-6K2CS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Project:</b>	Uintah County, UT UTM12	<b>MD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Site:</b>	Bonanza 1023-6K Pad	<b>North Reference:</b>	True
<b>Well:</b>	BONANZA 1023-6K2CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
Start Build 2.00										
400.00	2.00	319.64	399.98	1.33	-1.13	1.75	2.00	2.00	0.00	
500.00	4.00	319.64	499.84	5.32	-4.52	6.98	2.00	2.00	0.00	
600.00	6.00	319.64	599.45	11.96	-10.16	15.69	2.00	2.00	0.00	
700.00	8.00	319.64	698.70	21.25	-18.05	27.88	2.00	2.00	0.00	
766.58	9.33	319.64	764.52	28.89	-24.55	37.91	2.00	2.00	0.00	
Start 1727.47 hold at 766.58 MD										
800.00	9.33	319.64	797.50	33.02	-28.06	43.33	0.00	0.00	0.00	
900.00	9.33	319.64	896.17	45.37	-38.56	59.54	0.00	0.00	0.00	
1,000.00	9.33	319.64	994.85	57.73	-49.06	75.76	0.00	0.00	0.00	
1,100.00	9.33	319.64	1,093.53	70.09	-59.56	91.97	0.00	0.00	0.00	
1,200.00	9.33	319.64	1,192.20	82.44	-70.06	108.19	0.00	0.00	0.00	
1,240.33	9.33	319.64	1,232.00	87.43	-74.29	114.73	0.00	0.00	0.00	
GREEN RIVER										
1,300.00	9.33	319.64	1,290.88	94.80	-80.56	124.40	0.00	0.00	0.00	
1,400.00	9.33	319.64	1,389.56	107.16	-91.06	140.62	0.00	0.00	0.00	
1,500.00	9.33	319.64	1,488.23	119.51	-101.56	156.83	0.00	0.00	0.00	
1,600.00	9.33	319.64	1,586.91	131.87	-112.06	173.05	0.00	0.00	0.00	
1,700.00	9.33	319.64	1,685.59	144.22	-122.56	189.26	0.00	0.00	0.00	
1,800.00	9.33	319.64	1,784.26	156.58	-133.06	205.48	0.00	0.00	0.00	
1,900.00	9.33	319.64	1,882.94	168.94	-143.56	221.69	0.00	0.00	0.00	
2,000.00	9.33	319.64	1,981.62	181.29	-154.06	237.91	0.00	0.00	0.00	
2,100.00	9.33	319.64	2,080.29	193.65	-164.55	254.12	0.00	0.00	0.00	
2,200.00	9.33	319.64	2,178.97	206.00	-175.05	270.34	0.00	0.00	0.00	
2,300.00	9.33	319.64	2,277.65	218.36	-185.55	286.55	0.00	0.00	0.00	
2,331.77	9.33	319.64	2,309.00	222.29	-188.89	291.70	0.00	0.00	0.00	
9 5/8"										
2,400.00	9.33	319.64	2,376.32	230.72	-196.05	302.77	0.00	0.00	0.00	
2,494.04	9.33	319.64	2,469.12	242.34	-205.93	318.01	0.00	0.00	0.00	
Start Drop -1.75										
2,500.00	9.23	319.64	2,475.00	243.07	-206.55	318.97	1.75	-1.75	0.00	
2,600.00	7.48	319.64	2,573.94	254.14	-215.96	333.50	1.75	-1.75	0.00	
2,700.00	5.73	319.64	2,673.27	262.90	-223.40	345.00	1.75	-1.75	0.00	
2,800.00	3.98	319.64	2,772.91	269.34	-228.88	353.46	1.75	-1.75	0.00	
2,900.00	2.23	319.64	2,872.76	273.47	-232.38	358.87	1.75	-1.75	0.00	
3,000.00	0.48	319.64	2,972.73	275.26	-233.91	361.23	1.75	-1.75	0.00	
3,027.27	0.00	0.00	3,000.00	275.35	-233.98	361.34	1.75	-1.75	147.97	
Start 5567.00 hold at 3027.27 MD										
3,100.00	0.00	0.00	3,072.73	275.35	-233.98	361.34	0.00	0.00	0.00	
3,200.00	0.00	0.00	3,172.73	275.35	-233.98	361.34	0.00	0.00	0.00	
3,300.00	0.00	0.00	3,272.73	275.35	-233.98	361.34	0.00	0.00	0.00	
3,400.00	0.00	0.00	3,372.73	275.35	-233.98	361.34	0.00	0.00	0.00	
3,500.00	0.00	0.00	3,472.73	275.35	-233.98	361.34	0.00	0.00	0.00	
3,600.00	0.00	0.00	3,572.73	275.35	-233.98	361.34	0.00	0.00	0.00	
3,700.00	0.00	0.00	3,672.73	275.35	-233.98	361.34	0.00	0.00	0.00	
3,800.00	0.00	0.00	3,772.73	275.35	-233.98	361.34	0.00	0.00	0.00	
3,900.00	0.00	0.00	3,872.73	275.35	-233.98	361.34	0.00	0.00	0.00	

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well BONANZA 1023-6K2CS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Project:</b>	Uintah County, UT UTM12	<b>MD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Site:</b>	Bonanza 1023-6K Pad	<b>North Reference:</b>	True
<b>Well:</b>	BONANZA 1023-6K2CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,000.00	0.00	0.00	3,972.73	275.35	-233.98	361.34	0.00	0.00	0.00	
4,100.00	0.00	0.00	4,072.73	275.35	-233.98	361.34	0.00	0.00	0.00	
4,200.00	0.00	0.00	4,172.73	275.35	-233.98	361.34	0.00	0.00	0.00	
4,275.27	0.00	0.00	4,248.00	275.35	-233.98	361.34	0.00	0.00	0.00	
<b>WASATCH</b>										
4,300.00	0.00	0.00	4,272.73	275.35	-233.98	361.34	0.00	0.00	0.00	
4,400.00	0.00	0.00	4,372.73	275.35	-233.98	361.34	0.00	0.00	0.00	
4,500.00	0.00	0.00	4,472.73	275.35	-233.98	361.34	0.00	0.00	0.00	
4,600.00	0.00	0.00	4,572.73	275.35	-233.98	361.34	0.00	0.00	0.00	
4,700.00	0.00	0.00	4,672.73	275.35	-233.98	361.34	0.00	0.00	0.00	
4,800.00	0.00	0.00	4,772.73	275.35	-233.98	361.34	0.00	0.00	0.00	
4,900.00	0.00	0.00	4,872.73	275.35	-233.98	361.34	0.00	0.00	0.00	
5,000.00	0.00	0.00	4,972.73	275.35	-233.98	361.34	0.00	0.00	0.00	
5,100.00	0.00	0.00	5,072.73	275.35	-233.98	361.34	0.00	0.00	0.00	
5,200.00	0.00	0.00	5,172.73	275.35	-233.98	361.34	0.00	0.00	0.00	
5,300.00	0.00	0.00	5,272.73	275.35	-233.98	361.34	0.00	0.00	0.00	
5,400.00	0.00	0.00	5,372.73	275.35	-233.98	361.34	0.00	0.00	0.00	
5,500.00	0.00	0.00	5,472.73	275.35	-233.98	361.34	0.00	0.00	0.00	
5,600.00	0.00	0.00	5,572.73	275.35	-233.98	361.34	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,672.73	275.35	-233.98	361.34	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,772.73	275.35	-233.98	361.34	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,872.73	275.35	-233.98	361.34	0.00	0.00	0.00	
6,000.00	0.00	0.00	5,972.73	275.35	-233.98	361.34	0.00	0.00	0.00	
6,100.00	0.00	0.00	6,072.73	275.35	-233.98	361.34	0.00	0.00	0.00	
6,200.00	0.00	0.00	6,172.73	275.35	-233.98	361.34	0.00	0.00	0.00	
6,300.00	0.00	0.00	6,272.73	275.35	-233.98	361.34	0.00	0.00	0.00	
6,400.00	0.00	0.00	6,372.73	275.35	-233.98	361.34	0.00	0.00	0.00	
6,432.27	0.00	0.00	6,405.00	275.35	-233.98	361.34	0.00	0.00	0.00	
<b>MESAVERDE</b>										
6,500.00	0.00	0.00	6,472.73	275.35	-233.98	361.34	0.00	0.00	0.00	
6,600.00	0.00	0.00	6,572.73	275.35	-233.98	361.34	0.00	0.00	0.00	
6,700.00	0.00	0.00	6,672.73	275.35	-233.98	361.34	0.00	0.00	0.00	
6,800.00	0.00	0.00	6,772.73	275.35	-233.98	361.34	0.00	0.00	0.00	
6,900.00	0.00	0.00	6,872.73	275.35	-233.98	361.34	0.00	0.00	0.00	
7,000.00	0.00	0.00	6,972.73	275.35	-233.98	361.34	0.00	0.00	0.00	
7,100.00	0.00	0.00	7,072.73	275.35	-233.98	361.34	0.00	0.00	0.00	
7,200.00	0.00	0.00	7,172.73	275.35	-233.98	361.34	0.00	0.00	0.00	
7,300.00	0.00	0.00	7,272.73	275.35	-233.98	361.34	0.00	0.00	0.00	
7,400.00	0.00	0.00	7,372.73	275.35	-233.98	361.34	0.00	0.00	0.00	
7,500.00	0.00	0.00	7,472.73	275.35	-233.98	361.34	0.00	0.00	0.00	
7,600.00	0.00	0.00	7,572.73	275.35	-233.98	361.34	0.00	0.00	0.00	
7,700.00	0.00	0.00	7,672.73	275.35	-233.98	361.34	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,772.73	275.35	-233.98	361.34	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,872.73	275.35	-233.98	361.34	0.00	0.00	0.00	
8,000.00	0.00	0.00	7,972.73	275.35	-233.98	361.34	0.00	0.00	0.00	
8,100.00	0.00	0.00	8,072.73	275.35	-233.98	361.34	0.00	0.00	0.00	
8,200.00	0.00	0.00	8,172.73	275.35	-233.98	361.34	0.00	0.00	0.00	
8,300.00	0.00	0.00	8,272.73	275.35	-233.98	361.34	0.00	0.00	0.00	
8,400.00	0.00	0.00	8,372.73	275.35	-233.98	361.34	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,472.73	275.35	-233.98	361.34	0.00	0.00	0.00	
8,594.27	0.00	0.00	8,567.00	275.35	-233.98	361.34	0.00	0.00	0.00	
<b>BONANZA 1023-6K2CS PBHL</b>										



<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well BONANZA 1023-6K2CS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Project:</b>	Uintah County, UT UTM12	<b>MD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Site:</b>	Bonanza 1023-6K Pad	<b>North Reference:</b>	True
<b>Well:</b>	BONANZA 1023-6K2CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
BONANZA 1023-6K2CS	0.00	0.00	8,567.00	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
- plan hits target center									
- Circle (radius 25.00)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
2,331.77	2,309.00	9 5/8"	9.625	12.250	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,240.33	1,232.00	GREEN RIVER			
4,275.27	4,248.00	WASATCH			
6,432.27	6,405.00	MESAVERDE			

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.00	300.00	0.00	0.00	Start Build 2.00
766.58	764.52	28.89	-24.55	Start 1727.47 hold at 766.58 MD
2,494.04	2,469.12	242.34	-205.93	Start Drop -1.75
3,027.27	3,000.00	275.35	-233.98	Start 5567.00 hold at 3027.27 MD
8,594.27	8,567.00	275.35	-233.98	TD at 8594.27

# **Kerr McGee Oil and Gas Onshore LP**

**Uintah County, UT UTM12**

**Bonanza 1023-6K Pad**

**BONANZA 1023-6K2CS**

**OH**

**Plan: PLAN #1**

## **Standard Planning Report - Geographic**

**16 September, 2010**

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well BONANZA 1023-6K2CS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Project:</b>	Uintah County, UT UTM12	<b>MD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Site:</b>	Bonanza 1023-6K Pad	<b>North Reference:</b>	True
<b>Well:</b>	BONANZA 1023-6K2CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

<b>Project</b>	Uintah County, UT UTM12		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

<b>Site</b>	Bonanza 1023-6K Pad, SEC 6 T10S R23E		
<b>Site Position:</b>		<b>Northing:</b>	14,521,392.52 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,096,508.54 usft
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13.200 in
		<b>Grid Convergence:</b>	1.05 °

<b>Well</b>	BONANZA 1023-6K2CS, 1888' FSL 1720' FWL		
<b>Well Position</b>	<b>+N/-S</b>	0.00 ft	<b>Northing:</b> 14,521,429.24 usft
	<b>+E/-W</b>	0.00 ft	<b>Easting:</b> 2,096,524.13 usft
<b>Position Uncertainty</b>	0.00 ft	<b>Wellhead Elevation:</b>	<b>Latitude:</b> 39° 58' 32.848 N
			<b>Longitude:</b> 109° 22' 19.391 W
			<b>Ground Level:</b> 5,219.00 ft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	09/16/2010	11.11	65.89	52,406

<b>Design</b>	PLAN #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	319.64

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
766.58	9.33	319.64	764.52	28.89	-24.55	2.00	2.00	0.00	319.64	
2,494.04	9.33	319.64	2,469.12	242.34	-205.93	0.00	0.00	0.00	0.00	
3,027.27	0.00	0.00	3,000.00	275.35	-233.98	1.75	-1.75	0.00	180.00	
8,594.27	0.00	0.00	8,567.00	275.35	-233.98	0.00	0.00	0.00	0.00	BONANZA 1023-6K2CS

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well BONANZA 1023-6K2CS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Project:</b>	Uintah County, UT UTM12	<b>MD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Site:</b>	Bonanza 1023-6K Pad	<b>North Reference:</b>	True
<b>Well:</b>	BONANZA 1023-6K2CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,521,429.24	2,096,524.13	39° 58' 33.208 N	109° 22' 19.182 W
100.00	0.00	0.00	100.00	0.00	0.00	14,521,429.24	2,096,524.13	39° 58' 33.208 N	109° 22' 19.182 W
200.00	0.00	0.00	200.00	0.00	0.00	14,521,429.24	2,096,524.13	39° 58' 33.208 N	109° 22' 19.182 W
300.00	0.00	0.00	300.00	0.00	0.00	14,521,429.24	2,096,524.13	39° 58' 33.208 N	109° 22' 19.182 W
<b>Start Build 2.00</b>									
400.00	2.00	319.64	399.98	1.33	-1.13	14,521,430.54	2,096,522.97	39° 58' 33.221 N	109° 22' 19.197 W
500.00	4.00	319.64	499.84	5.32	-4.52	14,521,434.47	2,096,519.51	39° 58' 33.260 N	109° 22' 19.240 W
600.00	6.00	319.64	599.45	11.96	-10.16	14,521,441.01	2,096,513.75	39° 58' 33.326 N	109° 22' 19.313 W
700.00	8.00	319.64	698.70	21.25	-18.05	14,521,450.15	2,096,505.69	39° 58' 33.418 N	109° 22' 19.414 W
766.58	9.33	319.64	764.52	28.89	-24.55	14,521,457.67	2,096,499.06	39° 58' 33.493 N	109° 22' 19.497 W
<b>Start 1727.47 hold at 766.58 MD</b>									
800.00	9.33	319.64	797.50	33.02	-28.06	14,521,461.74	2,096,495.47	39° 58' 33.534 N	109° 22' 19.542 W
900.00	9.33	319.64	896.17	45.37	-38.56	14,521,473.90	2,096,484.75	39° 58' 33.656 N	109° 22' 19.677 W
1,000.00	9.33	319.64	994.85	57.73	-49.06	14,521,486.06	2,096,474.02	39° 58' 33.778 N	109° 22' 19.812 W
1,100.00	9.33	319.64	1,093.53	70.09	-59.56	14,521,498.22	2,096,463.30	39° 58' 33.900 N	109° 22' 19.947 W
1,200.00	9.33	319.64	1,192.20	82.44	-70.06	14,521,510.39	2,096,452.58	39° 58' 34.022 N	109° 22' 20.082 W
1,240.33	9.33	319.64	1,232.00	87.43	-74.29	14,521,515.29	2,096,448.25	39° 58' 34.072 N	109° 22' 20.136 W
<b>GREEN RIVER</b>									
1,300.00	9.33	319.64	1,290.88	94.80	-80.56	14,521,522.55	2,096,441.85	39° 58' 34.145 N	109° 22' 20.217 W
1,400.00	9.33	319.64	1,389.56	107.16	-91.06	14,521,534.71	2,096,431.13	39° 58' 34.267 N	109° 22' 20.352 W
1,500.00	9.33	319.64	1,488.23	119.51	-101.56	14,521,546.87	2,096,420.41	39° 58' 34.389 N	109° 22' 20.487 W
1,600.00	9.33	319.64	1,586.91	131.87	-112.06	14,521,559.03	2,096,409.68	39° 58' 34.511 N	109° 22' 20.622 W
1,700.00	9.33	319.64	1,685.59	144.22	-122.56	14,521,571.20	2,096,398.96	39° 58' 34.633 N	109° 22' 20.756 W
1,800.00	9.33	319.64	1,784.26	156.58	-133.06	14,521,583.36	2,096,388.24	39° 58' 34.755 N	109° 22' 20.891 W
1,900.00	9.33	319.64	1,882.94	168.94	-143.56	14,521,595.52	2,096,377.51	39° 58' 34.877 N	109° 22' 21.026 W
2,000.00	9.33	319.64	1,981.62	181.29	-154.06	14,521,607.68	2,096,366.79	39° 58' 34.999 N	109° 22' 21.161 W
2,100.00	9.33	319.64	2,080.29	193.65	-164.55	14,521,619.85	2,096,356.06	39° 58' 35.122 N	109° 22' 21.296 W
2,200.00	9.33	319.64	2,178.97	206.00	-175.05	14,521,632.01	2,096,345.34	39° 58' 35.244 N	109° 22' 21.431 W
2,300.00	9.33	319.64	2,277.65	218.36	-185.55	14,521,644.17	2,096,334.62	39° 58' 35.366 N	109° 22' 21.566 W
2,331.77	9.33	319.64	2,309.00	222.29	-188.89	14,521,648.03	2,096,331.21	39° 58' 35.405 N	109° 22' 21.609 W
<b>9 5/8"</b>									
2,400.00	9.33	319.64	2,376.32	230.72	-196.05	14,521,656.33	2,096,323.89	39° 58' 35.488 N	109° 22' 21.701 W
2,494.04	9.33	319.64	2,469.12	242.34	-205.93	14,521,667.77	2,096,313.81	39° 58' 35.603 N	109° 22' 21.828 W
<b>Start Drop -1.75</b>									
2,500.00	9.23	319.64	2,475.00	243.07	-206.55	14,521,668.49	2,096,313.17	39° 58' 35.610 N	109° 22' 21.836 W
2,600.00	7.48	319.64	2,573.94	254.14	-215.96	14,521,679.39	2,096,303.57	39° 58' 35.720 N	109° 22' 21.956 W
2,700.00	5.73	319.64	2,673.27	262.90	-223.40	14,521,688.01	2,096,295.96	39° 58' 35.806 N	109° 22' 22.052 W
2,800.00	3.98	319.64	2,772.91	269.34	-228.88	14,521,694.35	2,096,290.37	39° 58' 35.870 N	109° 22' 22.122 W
2,900.00	2.23	319.64	2,872.76	273.47	-232.38	14,521,698.41	2,096,286.79	39° 58' 35.911 N	109° 22' 22.167 W
3,000.00	0.48	319.64	2,972.73	275.26	-233.91	14,521,700.18	2,096,285.23	39° 58' 35.928 N	109° 22' 22.187 W
3,027.27	0.00	0.00	3,000.00	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
<b>Start 5567.00 hold at 3027.27 MD</b>									
3,100.00	0.00	0.00	3,072.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
3,200.00	0.00	0.00	3,172.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
3,300.00	0.00	0.00	3,272.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
3,400.00	0.00	0.00	3,372.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
3,500.00	0.00	0.00	3,472.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
3,600.00	0.00	0.00	3,572.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
3,700.00	0.00	0.00	3,672.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
3,800.00	0.00	0.00	3,772.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
3,900.00	0.00	0.00	3,872.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
4,000.00	0.00	0.00	3,972.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well BONANZA 1023-6K2CS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Project:</b>	Uintah County, UT UTM12	<b>MD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Site:</b>	Bonanza 1023-6K Pad	<b>North Reference:</b>	True
<b>Well:</b>	BONANZA 1023-6K2CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,100.00	0.00	0.00	4,072.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
4,200.00	0.00	0.00	4,172.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
4,275.27	0.00	0.00	4,248.00	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
<b>WASATCH</b>									
4,300.00	0.00	0.00	4,272.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
4,400.00	0.00	0.00	4,372.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
4,500.00	0.00	0.00	4,472.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
4,600.00	0.00	0.00	4,572.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
4,700.00	0.00	0.00	4,672.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
4,800.00	0.00	0.00	4,772.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
4,900.00	0.00	0.00	4,872.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
5,000.00	0.00	0.00	4,972.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
5,100.00	0.00	0.00	5,072.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
5,200.00	0.00	0.00	5,172.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
5,300.00	0.00	0.00	5,272.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
5,400.00	0.00	0.00	5,372.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
5,500.00	0.00	0.00	5,472.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
5,600.00	0.00	0.00	5,572.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
5,700.00	0.00	0.00	5,672.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
5,800.00	0.00	0.00	5,772.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
5,900.00	0.00	0.00	5,872.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
6,000.00	0.00	0.00	5,972.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
6,100.00	0.00	0.00	6,072.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
6,200.00	0.00	0.00	6,172.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
6,300.00	0.00	0.00	6,272.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
6,400.00	0.00	0.00	6,372.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
6,432.27	0.00	0.00	6,405.00	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
<b>MESAVERDE</b>									
6,500.00	0.00	0.00	6,472.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
6,600.00	0.00	0.00	6,572.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
6,700.00	0.00	0.00	6,672.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
6,800.00	0.00	0.00	6,772.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
6,900.00	0.00	0.00	6,872.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
7,000.00	0.00	0.00	6,972.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
7,100.00	0.00	0.00	7,072.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
7,200.00	0.00	0.00	7,172.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
7,300.00	0.00	0.00	7,272.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
7,400.00	0.00	0.00	7,372.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
7,500.00	0.00	0.00	7,472.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
7,600.00	0.00	0.00	7,572.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
7,700.00	0.00	0.00	7,672.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
7,800.00	0.00	0.00	7,772.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
7,900.00	0.00	0.00	7,872.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
8,000.00	0.00	0.00	7,972.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
8,100.00	0.00	0.00	8,072.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
8,200.00	0.00	0.00	8,172.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
8,300.00	0.00	0.00	8,272.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
8,400.00	0.00	0.00	8,372.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
8,500.00	0.00	0.00	8,472.73	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
8,594.27	0.00	0.00	8,567.00	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W
<b>BONANZA 1023-6K2CS PBHL</b>									

<b>Database:</b>	EDM5000-RobertS-Local	<b>Local Co-ordinate Reference:</b>	Well BONANZA 1023-6K2CS
<b>Company:</b>	Kerr McGee Oil and Gas Onshore LP	<b>TVD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Project:</b>	Uintah County, UT UTM12	<b>MD Reference:</b>	GL 5219 & RKB 14' @ 5233.00ft (ASSUMED)
<b>Site:</b>	Bonanza 1023-6K Pad	<b>North Reference:</b>	True
<b>Well:</b>	BONANZA 1023-6K2CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BONANZA 1023-6K2CS - plan hits target center - Circle (radius 25.00)	0.00	0.00	8,567.00	275.35	-233.98	14,521,700.27	2,096,285.16	39° 58' 35.929 N	109° 22' 22.188 W

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
2,331.77	2,309.00	9 5/8"	9.625	12.250	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,240.33	1,232.00	GREEN RIVER			
4,275.27	4,248.00	WASATCH			
6,432.27	6,405.00	MESAVERDE			

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.00	300.00	0.00	0.00	Start Build 2.00
766.58	764.52	28.89	-24.55	Start 1727.47 hold at 766.58 MD
2,494.04	2,469.12	242.34	-205.93	Start Drop -1.75
3,027.27	3,000.00	275.35	-233.98	Start 5567.00 hold at 3027.27 MD
8,594.27	8,567.00	275.35	-233.98	TD at 8594.27

Bonanza 1023-6E3AS/ 1023-6J2AS/ 1023-6K1CS/ 1023-6K2BS/  
 1023-6K2CS/ 1023-6L2AS/ 1023-6L2DS  
 Kerr-McGee Oil Gas Onshore, L.P.

Bonanza 1023-6K Pad  
 Surface Use Plan of Operations  
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## Kerr-McGee Oil & Gas Onshore. L.P.

### Bonanza 1023-6F Pad

<u><b>API #</b></u>	<u><b>BONANZA 1023-6E3AS</b></u>		
	Surface:	1870 FSL / 1712 FWL	NESW Lot
	BHL:	2286 FNL / 507 FWL	SWNW Lot 5
<u><b>API #</b></u>	<u><b>BONANZA 1023-6J2AS</b></u>		
	Surface:	1907 FSL / 1728 FWL	NESW Lot
	BHL:	2556 FSL / 2100 FEL	NWSE Lot
<u><b>API #</b></u>	<u><b>BONANZA 1023-6K1CS</b></u>		
	Surface:	1915 FSL / 1732 FWL	NESW Lot
	BHL:	2170 FSL / 2228 FWL	NESW Lot
<u><b>API #</b></u>	<u><b>BONANZA 1023-6K2BS</b></u>		
	Surface:	1897 FSL / 1724 FWL	NESW Lot
	BHL:	2590 FSL / 1412 FWL	NESW Lot
<u><b>API #</b></u>	<u><b>BONANZA 1023-6K2CS</b></u>		
	Surface:	1888 FSL / 1720 FWL	NESW Lot
	BHL:	2165 FSL / 1485 FWL	NESW Lot
<u><b>API #</b></u>	<u><b>BONANZA 1023-6L2AS</b></u>		
	Surface:	1861 FSL / 1708 FWL	NESW Lot
	BHL:	2590 FSL / 541 FWL	NWSW Lot 6
<u><b>API #</b></u>	<u><b>BONANZA 1023-6L2DS</b></u>		
	Surface:	1852 FSL / 1704 FWL	NESW Lot
	BHL:	2087 FSL / 557 FWL	NWSW Lot 6

This Surface Use Plan of Operations (SUPO) or 13-point plan provides the site-specific information for the above-referenced wells. This information incorporates by reference the Master Development Plan (MDP) for Kerr-McGee Oil & Gas Onshore LP (KMG). The MDP is available upon request from the BLM-Vernal Field Office.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

An on-site meeting was held on June 16, 2010. Present were:

- Dave Gordon, Suzanne Gray and Dan Emmett – BLM;
- John Slaugh, Brock Slaugh and Mitch Batty- Timberline Engineering & Land Surveying, Inc.; and
- Roger Parry, Clay Einerson, Grizz Oleen, Sheila Wopsock, Lovell Young, Grizz Oleen, Hal Blanchard, Lance Morton, Tim Donovan, Kathie Zehren, Laura Gianakos and Charles Chase – Kerr-McGee

Bonanza 1023-6E3AS/ 1023-6J2AS/ 1023-6K1CS/ 1023-6K2BS/  
1023-6K2CS/ 1023-6L2AS/ 1023-6L2DS  
Kerr-McGee Oil Gas Onshore, L.P.

Bonanza 1023-6K Pad  
Surface Use Plan of Operations  
2 of 7

**A. Existing Roads:**

A) Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

**The following segments are "onlease", no ROW needed.**

±1,940' (0.4 miles) – Section 6 T10S R23E (NE/4 SW/4) – On-lease UTU38419, from the end of the new road re-route to the southern section line boundary. Please refer to Topo B and Exhibit B2.

**B. New or Reconstructed Access Roads:**

See MDP for additional details on road construction.

±80' (0.02 miles) – Section 6 T10S R23E (NE/4 SW/4) – On-lease UTU38419, from the edge of pad a new road re-route will be constructed. Please refer to Topo B.

**C. Location of Existing Wells:**

A) Refer to Topo Map C.

**D. Location of Existing and/or Proposed Facilities:**

*See MDP for additional details on Location of Existing and/or Proposed Facilities. Also, please refer to Exhibit B and Topo D- Pad and Pipeline Detail.*

This pad will expand the existing pad for the Bonanza 6-2, which is a producing gas well according to Utah Division of Oil, Gas and Mining (UDOGM) records on December 29, 2010. Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee Oil and Gas Onshore LP (KMG).

**GAS GATHERING**

The gas gathering pipeline material: Steel line pipe with fusion bond epoxy coating. The total gas gathering pipeline distance from the meter to the tie in point is ±5,060' and the individual segments are broken up as follows:

**The following segments are "onlease", no ROW needed.**

±820' (0.2 miles) – Section 6 T10S R23E (NE/4 SW/4) – On-lease UTU38419, BLM surface, New 8" buried gas gathering pipeline from the meter to the edge of the pad. Please refer to Topo D- Pad and Pipeline Detail.  
±2,020' (0.04 miles) – Section 6 T10S R23E (NE/4 SW/4) – On-lease UTU38419, BLM surface, New 8" buried gas gathering pipeline from the edge of the pad to the southern section and lease line boundary. Please refer to Topo D Pad and Pipeline Detail and Exhibit A1.

**The following segments require a ROW.**

±1,220' (0.2 miles) – Section 7 T10S R23E (NW/4 NE/4) – Lease UTU38420, BLM surface, New 8" buried gas gathering pipeline from the northern section line boundary to the tie-in at the new 12" buried gas gathering pipeline (NW/4 NE/4). Please refer to Exhibit A1, Line 16.  
±1,000' (0.2 miles) – Section 7 T10S R23E (NW/4 NE/4) – Lease UTU38420, BLM surface, New 12" buried gas gathering pipeline from the tie-in (NW/ NE/4) to the tie-in at the existing 16" buried gas gathering pipeline (SE/4 NW/4). Please refer to Exhibit A1, Line 15.



### **LIQUID GATHERING**

The total liquid gathering pipeline distance from the separator to the tie in point is  $\pm 5,060'$  and the individual segments are broken up as follows:

**The following segments are "onlease", no ROW needed.**

- $\pm 820'$  (0.2 miles) – Section 6 T10S R23E (NE/4 SW/4) – On-lease UTU38419, BLM surface, New 6" buried liquid gathering pipeline from the separator to the edge of the pad. Please refer to Topo D Pad and Pipeline Detail.
- $\pm 2,020'$  (0.04 miles) – Section 6 T10S R23E (NE/4 SW/4) – On-lease UTU38419, BLM surface, New 6" buried liquid gathering pipeline from the edge of the pad to the southern section and lease line boundary. Please refer to Topo D Pad and Pipeline Detail and Exhibit B, Line 6.

**The following segments require a ROW.**

- $\pm 2,220'$  (0.4 miles) – Section 7 T10S R23E (NW/4 NE/4) – Lease UTU38420, BLM surface, New 6" buried liquid gathering pipeline from the northern section line boundary to the tie-in at the existing buried liquid gathering line (SE/4 NW/4 of section 7).

The liquid gathering lines will be made of polyethylene or a composite polyethylene/steel or polyethylene/fiberglass that is not subject to internal or external pipe corrosion. The content of the produced fluids to be transferred by the liquid gathering system will be approximately 92% produced water and 8% condensate. Trunk line valve connections for the water gathering system will be below ground but accessible from the surface in order to prevent freezing during winter time.

The proposed buried pipelines will be constructed utilizing existing disturbance when possible. The area of disturbance during construction from the edge of road or well pad will be 30' in width. The total pipeline disturbance width will be 30'. Where possible there will be no additional disturbance during construction, as the road will be utilized for construction vehicles. The liquid and gas gathering lines will be in the same trench.

The proposed trench width for the pipeline would range from 18-48 inch and will be excavated to a depth of 48 to 60 inches of normal soil cover or 24 inches of cover in consolidated rock. The pipeline will be welded or zap locked along the proposed right-of-way and lowered into place. During construction blasting may occur along the proposed right-of-way when trenching equipment can not cut into the bedrock. Large debris and rocks removed from the earth during trenching and blasting that could not be returned to the trench would be distributed evenly and naturally in the project area. The proposed buried pipeline will be visually and radiographically inspected and the entire pipeline will be pneumatically tested before being placed into service.

Upon completion of the proposed buried pipeline, the entire area of disturbance will be reclaimed to the standards proposed in the Green River District Reclamation Guidelines. Please refer to the MDP for more details regarding final reclamation. Pipeline signs will be installed along the right-of-way to indicate the pipeline proximity, ownership, and to provide emergency contact phone numbers. Above ground valves and lateral T's will be installed at various locations to connect the new line to existing facilities and/or for safety purposes. Kerr-McGee requests for a permanent 30' right-of-way that will be maintained for the portion adjacent to the road. The need for the 30' permanent right-of-way is for maintenance and repairs.

When no longer serving a useful purpose, Kerr-McGee or it's successor will consult with the BLM, Vernal Field Office before termination.

**The Anadarko Completions Transportation System (ACTS) information:**

*See MDP for additional details on the ACTS System.*

Upon completion of the wells on this pad, Kerr-McGee is also requesting to utilize this pit as an Anadarko Completion Transport System (ACTS) staging pit which will be utilized for other completion operations in the area. The ACTS process will reduce the amount of truck traffic on a field-wide basis, also reducing vehicle emissions and fugitive dust generation.

Kerr-McGee will use ACTS to optimize the completion processes for multiple pads across the project area which may include up to a section of development. ACTS will facilitate management of frac fluids by utilizing existing reserve pits and temporary, surface-laid aluminum liquids transfer lines between frac locations. The refurbished pit will be relined per the guidelines in the MDP. The pit will be refurbished as follows: mix and pile up drill cuttings with dry dirt, bury the original liner in the pit, walk bottom of pit with cat. Kerr-McGee will reline the pit with a 30 mil liner and double felt padding. The refurbished pit will be the same size or smaller as specified in the originally approved ROW/APD. The pit refurb will be done in a normal procedure and there will be no modification to the pit that does not coincide with Kerr-McGee's MDP. Hog fence panels (5' X 16') will be built and painted shadow gray and will be put up on the work side of the pit. Polypropylene netting will be installed over all pits. There will be two 500 bbl temporary frac tanks placed on the location. The trucks will unload water into these tanks before the water is placed into the refurbished pit. The

purpose of the temporary frac tanks is to collect any hydro-carbons that may have been associated with the other completion operations before releasing into the pit. The collected hydrocarbons will be treated and sold at approved sales facilities. A loading rack with drip containment will be also be installed where water trucks would unload and load to prevent damage caused from pulling hoses in and out of the pit .

ACTS will require temporarily laying multiple 6" aluminum water transfer lines on the surface between either existing or refurbished reserve pits. Please see the attached ACTS exhibit C for placement of the proposed temporary lines. The temporary aluminum transfer lines will be utilized to transport frac fluid being injected and/or recovered during the completion process and will be laid adjacent to existing access roads. Upon completion of the frac operation, the liquids transfer lines will be flushed with fresh water and purged with compressed air. The contents of the transfer lines will be flushed into a water truck for delivery to another ACTS location or a reserve pit.

The volume of frac fluid transported through a water transfer line will vary, but volume is projected to be approximately 1.75 bbls per 50-foot joint. Although the maximum working pressure is 125 psig, the liquids transfer lines will be operated at a pressure of approximately 30 to 40 psig.

Kerr-McGee requests to keep this netted pit open for one year. During this time the surrounding well location completion fluids may be recycled in this pit and utilized for other frac jobs in the area. After one year Kerr-McGee will backfill the pit and reclaim as stated in the MDP. Kerr-McGee understands that due to the temporary nature of this system, BLM considers this a casual use situation; therefore, no permanent ROW or temporary use plan will need to be issued by the BLM.

**E. Location and Types of Water Supply:**

See MDP for additional details on Location and Type of Water Supply.

Water for drilling and completion operations will be obtained from the following sources:

Permit # 49-2307	JD Field Services	Green River- Section 15, T2N, R22E
Permit # 49-2321	R.N. Industries	White River- Section 2, T10S, R24E

Bonanza 1023-6E3AS/ 1023-6J2AS/ 1023-6K1CS/ 1023-6K2BS/  
1023-6K2CS/ 1023-6L2AS/ 1023-6L2DS  
Kerr-McGee Oil Gas Onshore, L.P.

Bonanza 1023-6K Pad  
Surface Use Plan of Operations  
5 of 7

Permit # 49-2319

R.N. Industries

White River- Various Sources

Permit # 49-2320

R.N. Industries

Green River- Section 33, T8S, R23E

Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

**F. Construction Materials:**

*See MDP for additional details on Source of Construction Materials.*

**G. Methods for Handling Waste:**

*See MDP for additional details on Methods of Handling Waste Materials*

Fluids disposal and pipeline/haul routes are depicted on Topo Map A.

Any produced water separated from recoverable condensate from the proposed well will be contained in a water tank and will then be transported by pipeline and/or truck to one of the pre-approved disposal sites:

RNI in Sec. 5 T9S R22E

NBU #159 in Sec. 35 T9S R21E

Ace Oilfield in Sec. 2 T6S R20E

MC&MC in Sec. 12 T6S R19E

Pipeline Facility in Sec. 36 T9S R20E

Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E

Bonanza Evaporation Pond in Sec. 2 T10S R23E

Or to one of the following Kerr-McGee active Salt Water Disposal (SWD) wells:

NBU 159 SWD in Sec. 35 T9S R21E

CIGE 112D SWD in Sec. 19 T9S R21E

CIGE 114 SWD in Sec. 34 T9S R21E

NBU 921-34K SWD in Sec. 34 T9S R21E

NBU 921-33F SWD in Sec. 34 T9S R21E

**H. Ancillary Facilities:**

*See MDP for additional details on Ancillary Facilities.*

None are anticipated.

**I. Well Site Layout:**

*See MDP and Well Pad Design Summary for additional details on Well Site Layout.*

**J. Plans for Surface Reclamation:**

*See MDP for additional details on Plans for Reclamation of the Surface.*

**Site Specific Reclamation Considerations:**

Bonanza 1023-6E3AS/ 1023-6J2AS/ 1023-6K1CS/ 1023-6K2BS/  
 1023-6K2CS/ 1023-6L2AS/ 1023-6L2DS  
 Kerr-McGee Oil Gas Onshore, L.P.

Bonanza 1023-6K Pad  
 Surface Use Plan of Operations  
 6 of 7

Reclamation Monitoring Reference Point for all wells on Pad (where a reclamation monitoring point has not been established at the time of APD submission, it will be submitted for approval under separate cover prior to surface disturbing activities):

Seed Mix to be used for Well Site, Access Road, and Pipeline (as applicable):

<b>Bonanza Area Mix</b>	<b>Pure Live Seed lbs/acre</b>
Crested Wheat (Hycrest)	2
Bottlebrush Squirrelnail	1
Western Wheatgrass (Arriba)	1
Indian Ricegrass	1
Fourwing Saltbush	2
Shadscale	2
Forage Kochia	0.25
Rocky Mountain Bee Plant	0.5
<b>Total</b>	<b>9.75</b>

**K. Surface/Mineral Ownership:**

United States of America  
 Bureau of Land Management  
 170 South 500 East  
 Vernal, UT 84078  
 (435)781-4400

**L. Other Information:**

*See MDP for additional details on Other Information.*

**Onsite Specifics:**

- Construction: 30 Mil Double Felt
- Facilities: Will be painted Shadow Grey
- Top Soil: Need to save 4" topsoil

**Resource Reports:**

A Class I literature survey was completed on August 20, 2010 by Montgomery Archaeological Consultants, Inc (MOAC). For additional details please refer to report MOAC 10-066b.

A paleontological reconnaissance survey was completed on May 11, 2010 by SWCA Environmental Consultants. For additional details please refer to report UT10-14314-28.

Biological field survey was completed on May 3, 2010 by Grasslands Consulting, Inc (GCI). For additional details please refer to report GCI-218.

**Right-of-Ways (ROW):**

*See MDP for additional information on ROW*

**M. Lessee's or Operators' Representative & Certification:**

Gina T. Becker  
Regulatory Analyst II  
Kerr-McGee Oil & Gas Onshore LP  
PO Box 173779  
Denver, CO 80217-3779  
(720) 929-6086

Tommy Thompson  
General Manager, Drilling  
Kerr-McGee Oil & Gas Onshore LP  
PO Box 173779  
Denver, CO 80217-3779  
(720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

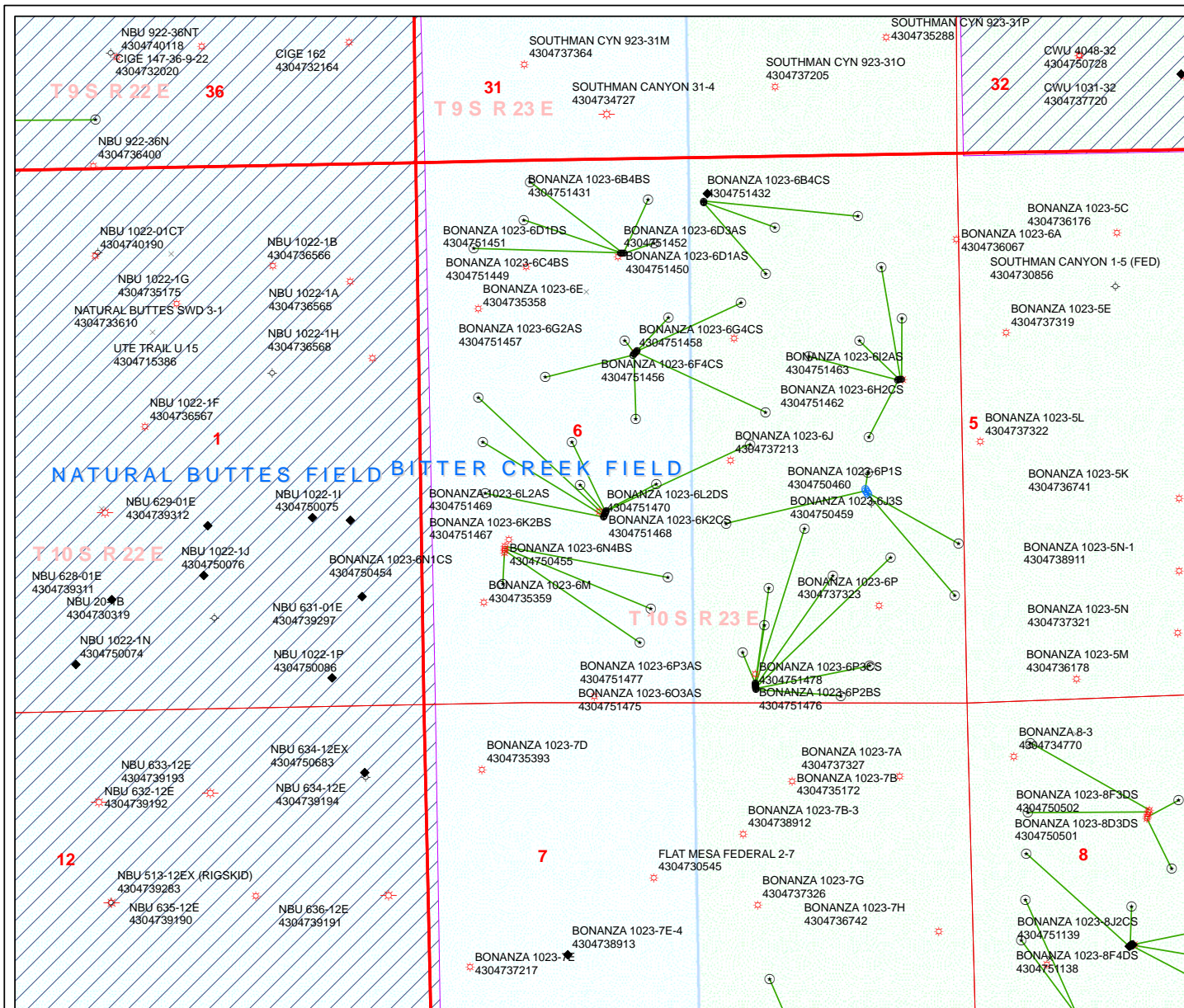


Gina T. Becker

December 29, 2010

Date

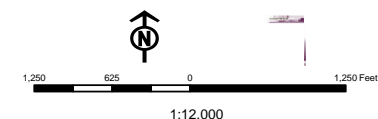




**API Number: 4304751468**  
**Well Name: BONANZA 1023-6K2CS**  
**Township 10.0 S Range 23.0 E Section 06**  
**Meridian: SLBM**  
**Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.**

Map Prepared:  
 Map Produced by Diana Mason

Units	Wells Query
STATUS	STATUS
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LA - Location Abandoned
PI OIL	LOC - New Location
PP GAS	OPS - Operation Suspended
PP GEOTHERMAL	PA - Plugged Abandoned
PP OIL	PGW - Producing Gas Well
SECONDARY	POW - Producing Oil Well
TERMINATED	RET - Returned APD
	SGW - Shut-in Gas Well
	SOW - Shut-in Oil Well
	TA - Temp. Abandoned
	TW - Test Well
	WDW - Water Disposal
	WIW - Water Injection Well
	WSW - Water Supply Well
Fields	
Unknown	
ABANDONED	
ACTIVE	
COMBINED	
INACTIVE	
STORAGE	
TERMINATED	
Sections	
Township	



# WORKSHEET

## APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 1/4/2011

**API NO. ASSIGNED:** 43047514680000

**WELL NAME:** BONANZA 1023-6K2CS

**OPERATOR:** KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995)

**PHONE NUMBER:** 720 929-6086

**CONTACT:** Gina Becker

**PROPOSED LOCATION:** NESW 06 100S 230E

**Permit Tech Review:** ☒

**SURFACE:** 1888 FSL 1720 FWL

**Engineering Review:** ☒

**BOTTOM:** 2165 FSL 1485 FWL

**Geology Review:** ☒

**COUNTY:** UINTAH

**LATITUDE:** 39.97587

**LONGITUDE:** -109.37214

**UTM SURF EASTINGS:** 639010.00

**NORTHINGS:** 4426138.00

**FIELD NAME:** NATURAL BUTTES

**LEASE TYPE:** 1 - Federal

**LEASE NUMBER:** UTU38419

**PROPOSED PRODUCING FORMATION(S):** WASATCH-MESA VERDE

**SURFACE OWNER:** 1 - Federal

**COALBED METHANE:** NO

### RECEIVED AND/OR REVIEWED:

- ☒ PLAT
- ☒ Bond: FEDERAL - WYB000291
- ☐ Potash
- ☐ Oil Shale 190-5
- ☐ Oil Shale 190-3
- ☐ Oil Shale 190-13
- ☒ Water Permit: Permit #43-8496
- ☐ RDCC Review:
- ☐ Fee Surface Agreement
- ☒ Intent to Commingle

Commingle Approved

### LOCATION AND SITING:

- ☐ R649-2-3.
- Unit:
- ☐ R649-3-2. General
- ☐ R649-3-3. Exception
- ☒ Drilling Unit
- Board Cause No: Cause 179-14
- Effective Date: 6/12/2008
- Siting: 460' Fr Exterior Drilling Unit Boundary
- ☒ R649-3-11. Directional Drill

**Comments:** Presite Completed

**Stipulations:** 3 - Commingle - ddoucet  
4 - Federal Approval - dmason  
15 - Directional - dmason





GARY R. HERBERT  
*Governor*

GREGORY S. BELL  
*Lieutenant Governor*

## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

### Permit To Drill

\*\*\*\*\*

**Well Name:** BONANZA 1023-6K2CS

**API Well Number:** 43047514680000

**Lease Number:** UTU38419

**Surface Owner:** FEDERAL

**Approval Date:** 1/19/2011

**Issued to:**

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

**Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 179-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

**Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

**Commingling:**

In accordance with Board Cause No. 179-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

**General:**

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

**Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)  
OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <https://oilgas.ogm.utah.gov>

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

**Approved By:**

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers  
Associate Director, Oil & Gas

RECEIVED

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

JAN 04 2011  
2011

FORM APPROVED  
OMB No. 1004-0136  
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

BLM

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU38419
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator KERR-MCGEE OIL & GAS ONSHORE		7. If Unit or CA Agreement, Name and No.
Contact: GINA T BECKER Email: GINA.BECKER@ANADARKO.COM		8. Lease Name and Well No. BONANZA 1023-6K2CS
3a. Address P.O. BOX 173779 DENVER, CO 80202-3779	3b. Phone No. (include area code) Ph: 720-929-6086 Fx: 720-929-7086	9. API Well No. 43-047-51468
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NESW 1888FSL 1720FWL 39.97586 N Lat, 109.37268 W Lon At proposed prod. zone NESW 2165FSL 1485FWL 39.97661 N Lat, 109.37351 W Lon		10. Field and Pool, or Exploratory BONANZA
14. Distance in miles and direction from nearest town or post office* APPROXIMATELY 51.7 MILES SOUTH OF VERNAL, UTAH		11. Sec., T., R., M., or Blk. and Survey or Area Sec 6 T10S R23E Mer SLB
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1485	16. No. of Acres in Lease 516.80	12. County or Parish UINTAH
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 366	19. Proposed Depth 8594 MD 8567 TVD	13. State UT
21. Elevations (Show whether DF, KB, RT, GL, etc.) 5221 GL	22. Approximate date work will start 06/30/2011	17. Spacing Unit dedicated to this well
		20. BLM/BIA Bond No. on file WYB000291
		23. Estimated duration 60-90 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)	Name (Printed/Typed) GINA T BECKER Ph: 720-929-6086	Date 01/04/2011
Title REGULATORY ANALYST II		
Approved by (Signature) 	Name (Printed/Typed) Jerry Kenczka	Date NOV 07 2011
Title Assistant Field Manager Lands & Mineral Resources	Office VERNAL FIELD OFFICE	

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

RECEIVED

Additional Operator Remarks (see next page)

NOV 28 2011

Electronic Submission #99968 verified by the BLM Well Information System  
For KERR-MCGEE OIL & GAS ONSHORE, sent to the Vernal  
Committed to AFMSS for processing by ROBIN R. HANSEN on 01/05/2011 ()

UDOGM

NOTICE OF APPROVAL  
CONDITIONS OF APPROVAL ATTACHED

\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\*

10RRH0296AE

NOV 4/26/2010



UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



**CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL**

Company: Kerr McGee Oil & Gas Onshore  
Well No: Bonanza 1023-6K2CS  
API No: 43-047-51468

Location: NESW, Sec.6, T10S, R23E  
Lease No: UTU-38419  
Agreement: N/A

**OFFICE NUMBER: (435) 781-4400**

**OFFICE FAX NUMBER: (435) 781-3420**

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR  
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

**NOTIFICATION REQUIREMENTS**

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: <a href="mailto:ut_vn_opreport@blm.gov">ut_vn_opreport@blm.gov</a> .
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

**SURFACE USE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

**Site Specific Conditions of Approval**

**General Conditions of Approval**

- Kerr McGee will adhere to all applicant committed conservation measures and conservation recommendations that are stated in the USFWS's "Final Biological Opinion for the Anadarko Petroleum Corporation Natural Buttes Unit and Bonanza Area Natural Gas Development Project.
- The operator will follow the Green River District Reclamation Guidelines for Reclamation.
- During operations if any vertebrate paleontological resources are discovered, in accordance with Section 6 of Form 3100-11 and 43 CFR 3162.1, all operations affecting such sites shall be immediately suspended, and all discoveries shall be left intact until authorized to proceed by the Authorized Officer. The appropriate Authorized Officer of the Vernal BLM office shall be notified within 48 hours of the discovery, and a decision as to the preferred alternative/course of action will be rendered.

**Mitigation for Invasive Weeds**

- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were previously operated outside the Uinta Basin, to prevent weed seed introduction.
- All disturbance areas would be monitored for noxious weeds annually, for a minimum of three growing seasons following completion of project or until desirable vegetation is established.
- Noxious and invasive weeds would be controlled throughout the area of project disturbance.
- Noxious weeds would be inventoried and reported to BLM in the annual reclamation report. Where an integrated pest management program is applicable, coordination has been undertaken with the state and local management program (if existing). A copy of the pest management plan would be submitted for each project.
- A pesticide use permit (PUP) would be obtained for the project, if applicable.

**DOWNHOLE PROGRAM  
CONDITIONS OF APPROVAL (COAs)**

**SITE SPECIFIC DOWNHOLE COAs:**

- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/08 and approved 7/28/08) shall be on location.
- Surface casing cement shall be brought to surface.
- Production casing cement shall be brought 200' up and into the surface casing.

**All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to.** The following items are emphasized:

**DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS**

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each

encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.



## OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at [www.ONRR.gov](http://www.ONRR.gov).
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: UTU38419
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: BONANZA 1023-6K2CS	
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.	9. API NUMBER: 43047514680000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6516	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1888 FSL 1720 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 06 Township: 10.0S Range: 23.0E Meridian: S	COUNTY: UINTAH	
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: <b>1/19/2012</b>	<input type="checkbox"/> ACIDIZE  <input type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input checked="" type="checkbox"/> APD EXTENSION  OTHER: <input type="text"/>
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Kerr-McGee Oil & Gas Onshore, L.P. (Kerr-McGee) respectfully requests an extension to this APD for the maximum time allowed. Please contact the undersigned with any questions and/or comments. Thank you.

**Approved by the**  
**Utah Division of**  
**Oil, Gas and Mining**  
 January 23, 2012

Date: \_\_\_\_\_

By: \_\_\_\_\_

NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst
SIGNATURE N/A		DATE 1/17/2012



**The Utah Division of Oil, Gas, and Mining**

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

**Request for Permit Extension Validation Well Number 43047514680000**

API: 43047514680000

Well Name: BONANZA 1023-6K2CS

Location: 1888 FSL 1720 FWL QTR NESW SEC 06 TWNP 100S RNG 230E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 1/19/2011

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- If located on private land, has the ownership changed, if so, has the surface agreement been updated? ☒ Yes ☐ No
- Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? ☐ Yes ☒ No
- Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? ☐ Yes ☒ No
- Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? ☐ Yes ☒ No
- Has the approved source of water for drilling changed? ☐ Yes ☒ No
- Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? ☐ Yes ☒ No
- Is bonding still in place, which covers this proposed well? ☒ Yes ☐ No

Signature: Danielle Piernot

Date: 1/17/2012

Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHORE, L.P.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU38419
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6K2CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1888 FSL 1720 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 06 Township: 10.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047514680000
<b>PHONE NUMBER:</b> 720 929-6514		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UINTAH		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 3/8/2012	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU TRIPPLE A BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 PIPE. CMT W/28 SX READY MIX. SPUD WELL ON 03/08/2012 AT 1700 HRS.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> March 16, 2012		
<b>NAME (PLEASE PRINT)</b> Sheila Wopsock	<b>PHONE NUMBER</b> 435 781-7024	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 3/14/2012	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU38419
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6K2CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1888 FSL 1720 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 06 Township: 10.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047514680000
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA</b>		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input checked="" type="checkbox"/> <b>NOTICE OF INTENT</b> Approximate date work will start: 3/19/2012  <input type="checkbox"/> <b>SUBSEQUENT REPORT</b> Date of Work Completion:  <input type="checkbox"/> <b>SPUD REPORT</b> Date of Spud:  <input type="checkbox"/> <b>DRILLING REPORT</b> Report Date:	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> ACIDIZE  <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION         </div> <div style="width: 33%;"> <input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input type="checkbox"/> OTHER         </div> <div style="width: 33%;"> <input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION            OTHER: <input style="width: 100px;" type="text"/> </div> </div>	
<b>12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.</b>  The operator requests approval for changes in the drilling plan. Specifically, the operator requests approval for a closed loop drilling option, a surface casing change and a production casing change. All other aspects of the previously approved drilling plan will not change. Please see the attachment. Thank you.		
<b>Accepted by the Utah Division of Oil, Gas and Mining</b>  <b>Date:</b> March 20, 2012  <b>By:</b> <u>Derek Quist</u>		
<b>NAME (PLEASE PRINT)</b> Jaime Scharnowske		<b>PHONE NUMBER</b> 720 929-6304
<b>SIGNATURE</b> N/A		<b>TITLE</b> Regulatory Analyst
<b>DATE</b> 3/19/2012		

**Kerr-McGee Oil & Gas Onshore. L.P.****BONANZA 1023-6K2CS**

Surface: 1888 FSL / 1720 FWL      NESW  
BHL: 2165 FSL / 1485 FWL      NESW

Section 6 T10S R23E

Uintah County, Utah  
Mineral Lease: UTU-38419

**ONSHORE ORDER NO. 1****DRILLING PROGRAM**

1. & 2. **Estimated Tops of Important Geologic Markers:**  
**Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:**

<u>Formation</u>	<u>Depth</u>	<u>Resource</u>
Uinta	0 - Surface	
Green River	1,232'	
Birds Nest	1,494'	Water
Mahogany	1,859'	Water
Wasatch	4,248'	Gas
Mesaverde	6,405'	Gas
Sego	8,567'	Gas
TVD	8,567'	
TD	8,594'	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program

6. **Evaluation Program:**

Please refer to the attached Drilling Program



**7. Abnormal Conditions:**

Maximum anticipated bottom hole pressure calculated at 8567' TVD, approximately equals  
5,483 psi 0.64 psi/ft = actual bottomhole gradient

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Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 3,586 psi (bottom hole pressure  
minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

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Per Onshore Order No. 2 - Max Anticipated Surf. Press. (MASP) = (Pore Pressure at next csg point -  
(0.22 psi/ft-partial evac gradient x TVD of next csg point))

**8. Anticipated Starting Dates:**

Drilling is planned to commence immediately upon approval of this application.

**9. Variances:**

Please refer to the attached Drilling Program.  
Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

**Background**

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

#### **Variance for BOPE Requirements**

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

#### **Variance for Mud Material Requirements**

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

#### **Variance for Special Drilling Operation (surface equipment placement) Requirements**

Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and

on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

#### **Variance for FIT Requirements**

KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

#### **Conclusion**

The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

#### **10. Other Information:**

Please refer to the attached Drilling Program.



**KERR-McGEE OIL & GAS ONSHORE LP**  
**DRILLING PROGRAM**

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP				DATE	March 19, 2012	
WELL NAME	<b>BONANZA 1023-6K2CS</b>				TD	8,567'	8,594' MD
FIELD	Natural Buttes	COUNTY	Uintah	STATE	Utah	FINISHED ELEVATION	5,219'
SURFACE LOCATION	NESW	1888 FSL	1720 FWL	Sec 6	T 10S	R 23E	
	Latitude:	39.975857	Longitude:	-109.372675		NAD 83	
BTM HOLE LOCATION	NESW	2165 FSL	1485 FWL	Sec 6	T 10S	R 23E	
	Latitude:	39.976613	Longitude:	-109.373510		NAD 83	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde						
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BLM (Surface), UDOGM Tri-County Health Dept.						

GEOLOGICAL			MECHANICAL		
LOGS	FORMATION	DEPTH	HOLE SIZE	CASING SIZE	MUD WEIGHT
		40'		14"	
			12-1/4"	8-5/8", 28#, U-55, LTC	Air mist
		200'			
			11"	8-5/8", 28#, U-55, LTC	Air mist
<p>All water flows encountered while drilling will be reported to the appropriate agencies.</p>					
	Green River @	1,232'			
	Top of Birds Nest @	1,494'			
	Mahogany @	1,859'			
	Preset f/ GL @	2,310' TVD			
<p>Note: 11" surface hole will usually be drilled ±400' below the lost circulation zone (aka bird's nest). Drilled depth may be ±200' of the estimated set depth depending on the actual depth of the loss zone.</p>					
	Wasatch @	4,248'			
<p>Mud logging program TBD Cased hole logging program from TD - surf csg</p>					
			7-7/8"	4-1/2" 11.6# I-80 Ultra DQX/LTC csg	Water / Fresh Water Mud 8.3-12.5 ppg
	Mverde @	6,405' TVD			
	Sego @	8,567' TVD			
<p>Max anticipated Mud required</p>					
		8,567' TVD			
	TD @	8,594' MD			
		12.5 ppg			





## KERR-McGEE OIL & GAS ONSHORE LP

### DRILLING PROGRAM

**CASING PROGRAM**

	SIZE	INTERVAL	WT.	GR.	CPLG.	DESIGN FACTORS			
						LTC		DQX	
						BURST	COLLAPSE	TENSION	
CONDUCTOR	14"	0-40'							
						3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0 to 2,310	28.00	IJ-55	LTC	2.34	1.74	6.14	N/A
						7,780	6,350	223,000	267,035
PRODUCTION	4-1/2"	0 to 5,000	11.60	I-80	DQX	1.11	1.14		3.31
	4-1/2"	5,000 to 8,594'	11.60	I-80	LTC	1.11	1.14	6.61	

**Surface Casing:**

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe  
 Fracture at surface shoe with 0.1 psi/ft gas gradient above  
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

**Production casing:**

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.64 psi/ft = bottomhole gradient  
 (Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing\*Buoy.Fact. of water)

**CEMENT PROGRAM**

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
SURFACE			NOTE: If well will circulate water to surface, option 2 will be utilized				
Option 2	LEAD	1,810'	65/35 Poz + 6% Gel + 10 pps gilsonite	170	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	3,744'	Premium Lite II +0.25 pps	290	35%	12.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	4,850'	50/50 Poz/G + 10% salt + 2% gel	1,150	35%	14.30	1.31
			+ 0.1% R-3				

\*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

\*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

**FLOAT EQUIPMENT & CENTRALIZERS**

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. 1 centralizer on the first 3 joints and one every third joint thereafter.

**ADDITIONAL INFORMATION**

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

**DRILLING ENGINEER:**

Nick Spence / Danny Showers / Chad Loesel

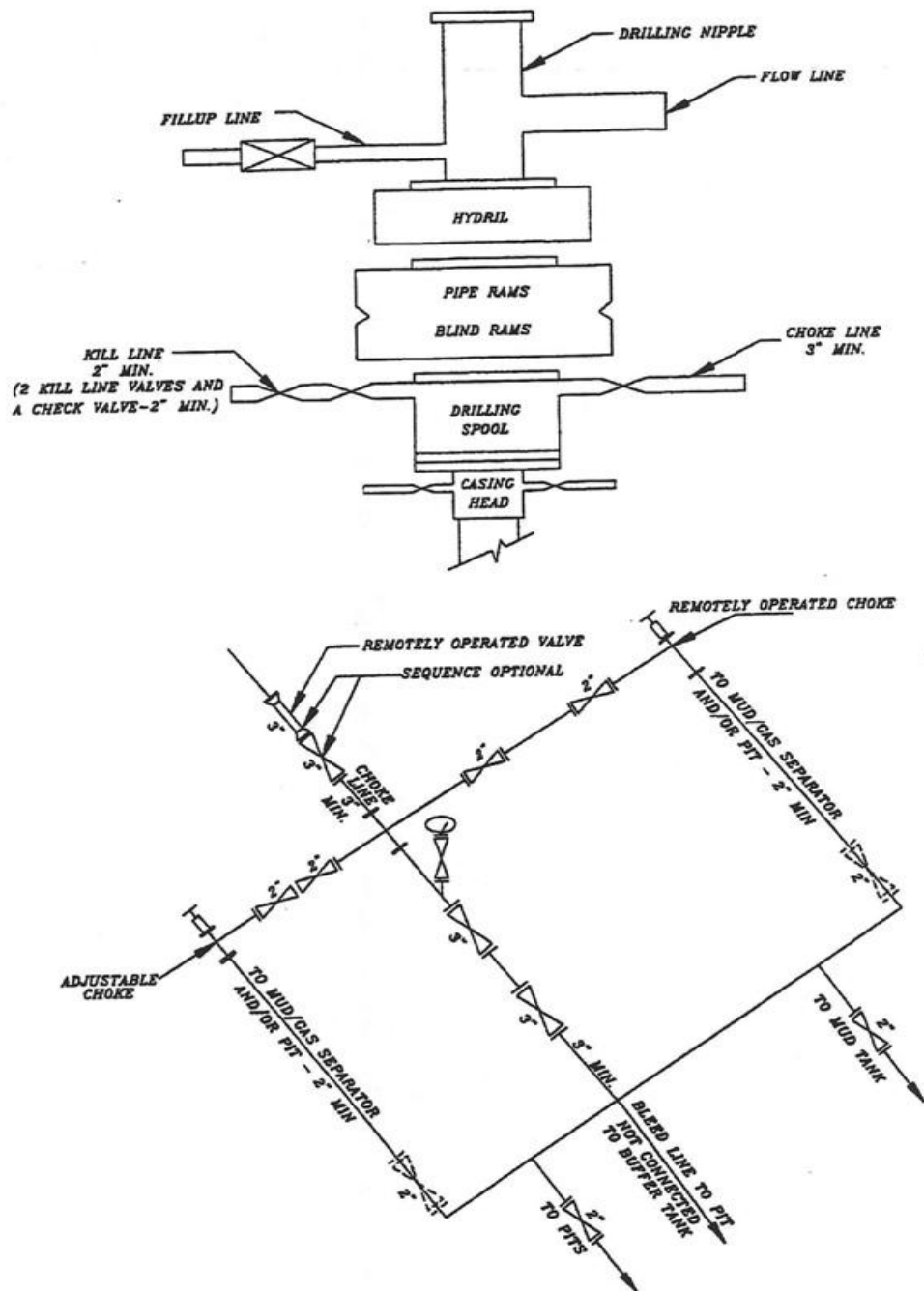
DATE: \_\_\_\_\_

**DRILLING SUPERINTENDENT:**

Kenny Gathings / Lovel Young

DATE: \_\_\_\_\_

**EXHIBIT A**  
**BONANZA 1023-6K2CS**



**SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK**

Requested Drilling Options:

Kerr-McGee will use either a closed loop drilling system that will require one pit and one cuttings storage area to be constructed on the drilling pad or a traditional drilling operation with one pit used for drilling and completion operations. The cuttings storage area will be used to contain only the de-watered drill cuttings and will be lined and bermed to prevent any liquid runoff. The drill cuttings will be buried in the completion pit once completion operations are completed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit will be lined with a synthetic material 20 mil or thicker and will be used for the completing of the wells on the pad or used as part of our Aandarko Completions Transportation System (ACTS). Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completions pit.

If Kerr-McGee does not use a closed loop drilling system, it will construct a traditional drilling/completions pit to contain drill cuttings and for use in completion operations. The pit will be lined with a synthetic material 20 mil or thicker. The drill cuttings will be buried in the pit using traditional pit closure standards.

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU38419
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6K2CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1888 FSL 1720 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 06 Township: 10.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047514680000
<b>PHONE NUMBER:</b> 720 929-6514		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UTAH		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 3/22/2012	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> CHANGE WELL NAME	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU AIR RIG ON MARCH 20, 2012. DRILLED SURFACE HOLE TO 2,465'. RAN SURFACE CASING AND CEMENTED. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> March 26, 2012		
<b>NAME (PLEASE PRINT)</b> Jaime Scharnowske	<b>PHONE NUMBER</b> 720 929-6304	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 3/23/2012	



**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: KERR MCGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995  
Address: 1368 SOUTH 1200 EAST  
city VERNAL  
state UT zip 84078 Phone Number: (435) 781-7024

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751468	BONANZA 1023-6K2CS		NESW	6	10S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
A	99999	18453	3/8/2012			3/20/2012	
<b>Comments:</b> MIRU TRIPPLE A BUCKET RIG. <u>WSMVD</u> SPUD WELL ON 03/08/2012 AT 1700 HRS. <u>BHL: nesw</u>							

**Well 2**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751464	BONANZA 1023-6E3AS		NESW	6	10S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
A	99999	18454	3/8/2012			3/20/2012	
<b>Comments:</b> MIRU TRIPPLE A BUCKET RIG. <u>WSMVD</u> SPUD WELL ON 03/08/2012 AT 1330 HRS. <u>BHL: swnw</u>							

**Well 3**

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751469	BONANZA 1023-6L2AS		NESW	6	10S	23E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
A	99999	18455	3/8/2012			3/20/2012	
<b>Comments:</b> MIRU TRIPPLE A BUCKET RIG. <u>WSMVD</u> SPUD WELL ON 03/08/2012 AT 1030 HRS. <u>BHL: nwsu</u>							

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

**RECEIVED**

**MAR 15 2012**

Div. of Oil, Gas & Mining

SHEILA WOPSOCK

Name (Please Print)

Signature

REGULATORY ANALYST

Title

3/13/2012

Date

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU38419
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6K2CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1888 FSL 1720 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 06 Township: 10.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047514680000
<b>PHONE NUMBER:</b> 720 929-6514		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UTAH		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:  <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input checked="" type="checkbox"/> DRILLING REPORT Report Date: 5/18/2012	<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"> <input type="checkbox"/> ACIDIZE   <input type="checkbox"/> CHANGE TO PREVIOUS PLANS   <input type="checkbox"/> CHANGE WELL STATUS   <input type="checkbox"/> DEEPEN   <input type="checkbox"/> OPERATOR CHANGE   <input type="checkbox"/> PRODUCTION START OR RESUME   <input type="checkbox"/> REPERFORATE CURRENT FORMATION   <input type="checkbox"/> TUBING REPAIR   <input type="checkbox"/> WATER SHUTOFF   <input type="checkbox"/> WILDCAT WELL DETERMINATION         </div> <div style="width: 33%;"> <input type="checkbox"/> ALTER CASING   <input type="checkbox"/> CHANGE TUBING   <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS   <input type="checkbox"/> FRACTURE TREAT   <input type="checkbox"/> PLUG AND ABANDON   <input type="checkbox"/> RECLAMATION OF WELL SITE   <input type="checkbox"/> SIDETRACK TO REPAIR WELL   <input type="checkbox"/> VENT OR FLARE   <input type="checkbox"/> SI TA STATUS EXTENSION   <input type="checkbox"/> OTHER         </div> <div style="width: 33%;"> <input type="checkbox"/> CASING REPAIR   <input type="checkbox"/> CHANGE WELL NAME   <input type="checkbox"/> CONVERT WELL TYPE   <input type="checkbox"/> NEW CONSTRUCTION   <input type="checkbox"/> PLUG BACK   <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION   <input type="checkbox"/> TEMPORARY ABANDON   <input type="checkbox"/> WATER DISPOSAL   <input type="checkbox"/> APD EXTENSION           OTHER: <input style="width: 100px;" type="text"/> </div> </div>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. <div style="display: flex; justify-content: space-between;"> <div style="width: 70%;">           MIRU ROTARY RIG. FINISHED DRILLING FROM 2465' TO 8614' ON 5/17/2012. RAN 4-1/2" 11.6# I-80 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED XTREME 12 RIG ON 5/17/2012 @ 8:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.         </div> <div style="width: 25%; text-align: center;"> <b>Accepted by the Utah Division of Oil, Gas and Mining</b>  <b>FOR RECORD ONLY</b>            May 21, 2012         </div> </div>		
<b>NAME (PLEASE PRINT)</b> Cara Mahler	<b>PHONE NUMBER</b> 720 929-6029	<b>TITLE</b> Regulatory Analyst I
<b>SIGNATURE</b> N/A	<b>DATE</b> 5/21/2012	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU38419
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6K2CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1888 FSL 1720 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 06 Township: 10.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047514680000
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<b>COUNTY:</b> UTAH		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 7/6/2012	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER	
	OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. No activity for the month of June 2012. Well TD at 8,614'.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> July 10, 2012		
<b>NAME (PLEASE PRINT)</b> Jaime Scharnowske	<b>PHONE NUMBER</b> 720 929-6304	<b>TITLE</b> Regulatory Analyst
<b>SIGNATURE</b> N/A	<b>DATE</b> 7/6/2012	

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU38419
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6K2CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1888 FSL 1720 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 06 Township: 10.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047514680000
<b>5. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UTAH		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 8/2/2012	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE TUBING	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. No activity for the month of July 2012. Well TD at 8,614'.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> August 02, 2012		
<b>NAME (PLEASE PRINT)</b> Cara Mahler	<b>PHONE NUMBER</b> 720 929-6029	<b>TITLE</b> Regulatory Analyst I
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/2/2012	



<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		<b>FORM 9</b>
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		<b>5. LEASE DESIGNATION AND SERIAL NUMBER:</b> UTU38419
<b>1. TYPE OF WELL</b> Gas Well		<b>6. IF INDIAN, ALLOTTEE OR TRIBE NAME:</b>
<b>2. NAME OF OPERATOR:</b> KERR-MCGEE OIL & GAS ONSHORE, L.P.		<b>7. UNIT or CA AGREEMENT NAME:</b>
<b>3. ADDRESS OF OPERATOR:</b> P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779		<b>8. WELL NAME and NUMBER:</b> BONANZA 1023-6K2CS
<b>4. LOCATION OF WELL</b> <b>FOOTAGES AT SURFACE:</b> 1888 FSL 1720 FWL <b>QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:</b> Qtr/Qtr: NESW Section: 06 Township: 10.0S Range: 23.0E Meridian: S		<b>9. API NUMBER:</b> 43047514680000
<b>PHONE NUMBER:</b> 720 929-6514		<b>9. FIELD and POOL or WILDCAT:</b> NATURAL BUTTES
<b>COUNTY:</b> UTAH		<b>STATE:</b> UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA		
<b>TYPE OF SUBMISSION</b>	<b>TYPE OF ACTION</b>	
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> ALTER CASING	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> DRILLING REPORT Report Date: 8/24/2012	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	
	<input type="checkbox"/> CHANGE WELL STATUS	
	<input type="checkbox"/> CHANGE WELL NAME	
	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	
	<input type="checkbox"/> CONVERT WELL TYPE	
	<input type="checkbox"/> DEEPEN	
	<input type="checkbox"/> FRACTURE TREAT	
	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	
	<input type="checkbox"/> PLUG AND ABANDON	
	<input type="checkbox"/> PLUG BACK	
	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME	
	<input type="checkbox"/> RECLAMATION OF WELL SITE	
	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	
	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	
	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	
	<input type="checkbox"/> VENT OR FLARE	
	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	
	<input type="checkbox"/> SI TA STATUS EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	
	<input type="checkbox"/> OTHER: <input style="width: 100px;" type="text"/>	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. THE SUBJECT WELL WAS PLACED ON PRODUCTION ON 8/24/2012. THE CHRONOLOGICAL WELL HISTORY WILL BE SUBMITTED WITH THE WELL COMPLETION REPORT.		
Accepted by the Utah Division of Oil, Gas and Mining <b>FOR RECORD ONLY</b> August 28, 2012		
<b>NAME (PLEASE PRINT)</b> Cara Mahler	<b>PHONE NUMBER</b> 720 929-6029	<b>TITLE</b> Regulatory Analyst I
<b>SIGNATURE</b> N/A	<b>DATE</b> 8/27/2012	

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**WELL COMPLETION OR RECOMPLETION REPORT AND LOG**

1a. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other		5. Lease Serial No. UTU38419	
b. Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr. Other _____		6. If Indian, Allottee or Tribe Name	
2. Name of Operator KERR MCGEE OIL & GAS ONSHORE		7. Unit or CA Agreement Name and No. UTU88209A	
3. Address 1099 18TH STREET, SUITE 1800 DENVER, CO 80202		8. Lease Name and Well No. BONANZA 1023-6K2CS ✓	
Contact: CARA MAHLER Mail: cara.mahler@anadarko.com		9. API Well No. 43-047-51468	
3a. Phone No. (include area code) Ph: 720-929-8029		10. Field and Pool, or Exploratory NATURAL BUTTES	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface NESW 1888FSL 1720FWL 39.975856 N Lat, 109.372674 W Lon At top prod interval reported below NESW 2183FSL 1491FWL At total depth NESW 2159FSL 1494FWL <i>BHL 67 HSM</i>		11. Sec., T., R., M., or Block and Survey or Area Sec 6 T10S R23E Mer SLB	
14. Date Spudded 03/08/2012		15. Date T.D. Reached 05/17/2012	
16. Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod. 08/24/2012		17. Elevations (DF, KB, RT, GL)* 5219 GL	
18. Total Depth: MD 8614 TVD 8582	19. Plug Back T.D.: MD 8558 TVD 8526	20. Depth Bridge Plug Set: MD TVD	
21. Type Electric & Other Mechanical Logs Run (Submit copy of each) BHV-SD/DSN/ACTR-CBL/GR/CCL/TEMP		22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit analysis)	

23. Casing and Liner Record (Report all strings set in well)									
Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7	0	40		28			
11.000	8.625 IJ-55	28.0	0	2458		575		0	
7.875	4.500 P-110	11.6	0	8603		1585		1362	

24. Tubing Record									
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	
2.375	7953								

25. Producing Intervals				26. Perforation Record			
Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status	
A) WASATCH	5687	6410	5687 TO 6410	0.360	48	OPEN	
B) MESAVERDE	7105	8470	7105 TO 8470	0.360	114	OPEN	
C)							
D)							

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.		RECEIVED
Depth Interval	Amount and Type of Material	
5687 TO 8470	PUMP 7,837 BBLS SLICK H2O & 163,400 LBS 30/50 OTTAWA SAND	SEP 25 2012
		DIV. OF OIL, GAS & MINING

28. Production - Interval A									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
08/24/2012	08/26/2012	24	→	0.0	2276.0	0.0			FLows FROM WELL
Choke Size	Tbg. Press. Plwg. 1523 SI	Csg. Press. 2192.0	24 Hr. Rate →	Oil BBL 0	Gas MCF 2276	Water BBL 0	Gas:Oil Ratio	Well Status PGW	
28a. Production - Interval B									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Plwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #150790 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

**\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\***

**28b. Production - Interval C**

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

**28c. Production - Interval D**

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

**29. Disposition of Gas(Sold, used for fuel, vented, etc.)**

**SOLD**

**30. Summary of Porous Zones (Include Aquifers):**

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

**31. Formation (Log) Markers**

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
				GREEN RIVER	1236
				BIRD'S NEST	1505
				MAHOGANY	1955
				WASATCH	4271
				MESAVERDE	6451

**32. Additional remarks (include plugging procedure):**

The first 210 ft. of the surface hole was drilled with a 12 ? in. bit. The remainder of the surface hole was drilled with an 11 in. bit. DQX csg was run from surface to 5,036 ft.; LTC csg was run from 5,036 ft. to 8,603 ft. Attached is the chronological well history, perforation report & final survey.

**33. Circle enclosed attachments:**

- |   |                    |               |                       |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.)     | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis   | 7 Other:      |                       |

**34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):**

**Electronic Submission #150790 Verified by the BLM Well Information System.  
For KERR MCGEE OIL & GAS ONSHORE L, sent to the Vernal**

Name (please print) CARA MAHLER

Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission)

Date 09/18/2012

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**\*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\* ORIGINAL \*\***

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: XTC 12/12, CAPSTAR 310/310

Event: DRILLING

Start Date: 12/8/2011

End Date: 5/18/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
3/20/2012	6:00 - 11:00	5.00	DRLSUR	01	A	P		SKID RIG, RIG UP
	11:00 - 14:00	3.00	DRLSUR	01	B	P		WELD ON ROT HEAD, INSTALL BLOWME LINE, PU BHA, AIR OUT PUMPS
	14:00 - 17:00	3.00	DRLSUR	02	D	P		SPUD DRLG 12.25" SURFACE HOLE F/40' T/ 210' ROP=100 ' @ FPH WOB= 24-28K RPM= 55/105 SPP= 920/580 GPM= 620 TRQ= 2800/1700 PU/SO/RT= 28/22/25
	17:00 - 18:00	1.00	DRLSUR	06	A	P		POOH, LD 12.25'
	18:00 - 19:30	1.50	DRLSUR	06	A	P		PU 11.00" BIT AND DIR TOOLS, TIH
	19:30 - 0:00	4.50	DRLSUR	02	D	P		DRLG 11.00" SURFACE HOLE F/210' T/ 550' ROP=76 ' @ FPH WOB= 24-28K RPM= 55/105 SPP= 1010/750 GPM= 620 TRQ= 2800/1700 PU/SO/RT= 63/54/57
3/21/2012	0:00 - 7:30	7.50	DRLSUR	02	D	P		DRLG 11.00" SURFACE HOLE F/550' T/ 1468' ROP=76 ' @ FPH WOB= 24-28K RPM= 55/105 SPP= 1050/850 GPM= 620 TRQ= 2800/1700 PU/SO/RT= 70/64/67
	7:30 - 8:00	0.50	DRLSUR	07	A	P		RIG SERVICE
	8:00 - 0:00	16.00	DRLSUR	02	D	P		DRLG 11.00" SURFACE HOLE F/1468' T/2450' ROP=61 ' @ FPH WOB= 24-28K RPM= 55/105 SPP= 1200/950 GPM= 620 TRQ= 2800/1700 PU/SO/RT= 112/90/102 ON AIR 900 CFM FROM 1665'  FROM 1468 TO 1800' DRILLING /SLIDING WITH 1 PUMP ONLY. PUMP 1 DOWN, SUCTION HOSE FROM CHARGE PUMP FAILED. PART ON ROUTE FROM VERNAL. PART ARRIVED, REPAIRED PUMP AT 1300



**US ROCKIES REGION**  
**Operation Summary Report**

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Spud Date: 3/20/2012

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Rig Name No: XTC 12/12, CAPSTAR 310/310

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UWI: NE/SW0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
3/22/2012	0:00 - 0:30	0.50	DRLSUR	02	D	P		<p>DRLG 11.00" SURFACE HOLE F/2450' T/2465'</p> <p>ROP=61' @ FPH</p> <p>WOB= 24-28K</p> <p>RPM= 55/105</p> <p>SPP= 1210/950</p> <p>GPM= 620</p> <p>TRQ= 2800/1700</p> <p>PU/SO/RT= 113/90/104</p> <p>ON AIR 900 CFM FROM 1865'</p> <p>CIRC PRIOR TO TRIP</p>
	0:30 - 2:00	1.50	DRLSUR	05	C	P		
	2:00 - 5:30	3.50	DRLSUR	06	D	P		<p>POOH, LAY DOWN 11.00" BIT AND DIRECTIONAL TOOLS</p>
	5:30 - 6:00	0.50	DRLSUR	12	A	P		<p>RIG UP TO RUN CASING</p>
	6:00 - 8:30	2.50	DRLSUR	12	C	P		<p>PJSM /// RUN 55 JT'S, 8-5/8", 28#, J-55, LT&amp;C CSG</p> <p>/// SHOE SET @ 2442' /// BAFFLE @ 2396'</p>
	8:30 - 12:00	3.50	DRLSUR	12	E	P		<p>//PJSM// PRESSURE TEST LINES TO 2000 PSI. PUMP 140 BBLs OF WATER AHEAD. PUMP 20 BBLs OF 8.3# GEL WATER AHEAD. PUMP (300 SX) 61.4 BBLs OF 15.8# 1.15 YD 5 GAL/SK PREMIUM CEMENT. DROP PLUG ON FLY. DISPLACE W/ 149.6 BBLs OF H2O. FINAL LIFT OF 300 PSI AT 4 BBL/MIN. BUMP PLUG W/800 PSI HELD FOR 5 MIN. FLOAT DID NOT HOLD. PUMP (275 SX) 56.3 BBLs OF SAME TAIL CEMENT W/ 4% CALC. (2 TOPOUTS)DOWN BACKSIDE. WAIT 1.5 HOURS, IN BETWEEN EACH TOPOUT, SHUT DOWN AND CLEAN TRUCK. NO CEMENT TO SURFACE. WILL TOP OUT ON NEXT JOB</p>
5/13/2012	19:00 - 21:00	2.00	MIRU	01	C	P		<p>RELEASE RIG AT 1200, SKID TO BONANZA 1023-6K2BS, WELL 5 OF 7</p> <p>PULL CATWALK FOWARD. INSTALL ZIPPER LINE. SKID RIG FOWARD 20' PAST PRE-EXISTING WELL AND OVER WELL. CENTER AND LEVEL RIG. PUSH CAT WALK BACK INTO PLACE. INSTALL VIBRATING HOSES.</p>
	21:00 - 21:30	0.50	MIRU	14	A	P		<p>SET DOWN STACK AND SCREW DOWN CAMERON QUICK FLANGE. INSTALL 20' EXTENSION FOR CHOKE LINE. INSTALL FLOW LINE AND CHAIN UP. INSTALL TURN BUCKLES TO STACK.</p>
	21:30 - 0:00	2.50	MIRU	15	A	P		<p>(FILL PITS WITH DRILL WATER AND RUN CONVENTIONAL TO REMOVE SOLIDS)</p> <p>HOLD SAFETY MEETING.</p> <p>TEST TOP DRIVE VALVE, I-BOP VALVE, FLOOR VALVE, DART VALVE, PIPE AND BLIND RAMS, INSIDE AND OUTSIDE KILL LINE VALVES INSIDE CHOKE LINE VALVE, HCR VALVE, CHOKE LINE, CHOKE MANIFOLD VALVES AND CHOKES TO 5000 PSI FOR 10 MINUTES AND 250 PSI FOR 5 MINUTES.</p>
5/14/2012	0:00 - 2:00	2.00	MIRU	15	A	P		<p>TEST ANNULAR TO 2500 PSI FOR 10 MIN AND 250 PSI FOR 5 MINUTES.</p> <p>TESTING CASING TO 1500 PSI FOR 30 MINUTES. INSTALL WEAR BUSHING.</p> <p>(PREPARE BHA AND DRILL PIPE WHILE TESTING)</p>

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: XTC 12/12, CAPSTAR 310/310

Event: DRILLING

Start Date: 12/8/2011

End Date: 5/18/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	2:00 - 2:30	0.50	MIRU	07	A	P		SERVICE TOP DRIVE. CHECK BRAKES AND ADJUST. CHECK EMERGENCY E-STOP BUTTON. PERFORM PRE SPUD INSPECTION.
	2:30 - 6:00	3.50	MIRU	06	A	P		P/U WEATHERFORD 1.5 BH .20 RPG MOTOR (SN 625-1482). MADE UP SMITH MDI 516 BIT W/ 5-16'S (SN JF4227). SCRIBED MOTOR. P/U DOUBLE PIN, NON MAG TOOL CARRIER AND EM SUB. INSTALL EM TOOL. P/U MONEL AND CROSSOVER TO HWDP. TRIP IN HOLE WITH HEAVY WEIGHT DRILL PIPE @ 950' INSTALL NEW ROTATING HEAD RUBBER. TRIP IN AND TAG CEMENT 2344'.
	6:00 - 7:00	1.00	DRLPRO	02	F	P		SPUD 5/14//2012 06:00 DRILL CEMENT AND FLOAT EQUIPMENT 2344'-2471'. SURFACE CASING SHOE @ 2448'. DRILLED WITH 15K ON BIT AND 45 RPM. @ 450 GPM.
	7:00 - 12:00	5.00	DRLPRO	02	D	P		DRILL SLIDE 2471'-3081' (610', 122'/HR) WEIGHT ON BIT 18-21K. AVERAGE WEIGHT ON BIT 19K. ROTARY RPM 60. MUD MOTOR RPM 103. STROKES PER MINUTE 115 GALLONS PER MINUTE 517. ON/OFF PSI 1800/1350. DIFFERENTIAL 450. TORQUE HIGH/LOW 8200/7500. OFF BOTTOM TORQUE 3000 STRING WEIGHT UP/DOWN/ROT 86/68/71. DRAG 15K. COME OUT OF SHOE @ 9 DEGREES AND DROP. SLIDE TO DROP ANGLE 17' NORTH 20' WEST OF CENTER @ 3081". SLIDE 90° AT 70°/HR. SLIDE 15° ROTATE 85%. RUNNING 2 CENTRIFUGES AND DE WATERING. ( WT 8.5 VIS 28. ) USED 33 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 30 BBLS DRILL WATER INTO FORMATION. (LOSING 6 BBLS HR) PUMP 50 VIS GEL AND 5% SAWDUST SWEEPS TO HELP CONTROL LOSSES. PUMP 15 BBLS SWEEP EVERY 200'. (ADD 50 BBLS OF DRILL WATER TO PITS FOR VOLUME) NO FLARE. BOP DRILL 45 SEC

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: XTC 12/12, CAPSTAR 310/310

Event: DRILLING

Start Date: 12/8/2011

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Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	12:00 - 17:30	5.50	DRLPRO	02	D	P		<p>DRILL SLIDE 3081'-3898' (817',148'/HR) WEIGHT ON BIT 18-21K. AVERAGE WEIGHT ON BIT 19K. ROTARY RPM 60. MUD MOTOR RPM 103. STROKES PER MINUTE 115 GALLONS PER MINUTE 517. ON/OFF PSI 1850/1425. DIFFERENTIAL 425. TORQUE HIGH/LOW 8000/6800. OFF BOTTOM TORQUE 3200 STRING WEIGHT UP/DOWN/ROT 89/74/79. DRAG 11K. HOLE VERTICAL AT 3171'. WELLBORE 7' NORTH 15' WEST OF CENTER @ 3802'. SLIDE 40' AT 60'/HR. SLIDE 5% ROTATE 95%. RUNNING 2 CENTRIFUGES AND DE WATERING.( WT 8.5 VIS 28. ) USED 44 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 82 BBLS DRILL WATER INTO FORMATION. (LOSING 15 BBLS HR) PUMP 50 VIS GEL AND 5% SAWDUST SWEEPS TO HELP CONTROL LOSSES. PUMP 15 BBLS SWEEP EVERY 200'. (ADD 130 BBLS OF FRESH TO PITS FOR VOLUME) NO FLARE. BOP DRILL 45 SEC</p>
	17:30 - 18:00	0.50	DRLPRO	07	A	P		<p>SERVICE RIG. SERVICE TOP DRIVE. CHECK BRAKES FOR ADJUSTMENT. CHECK EMERGENCY STOP BUTTON. SERVICE CROWN.</p>
	18:00 - 0:00	6.00	DRLPRO	02	D	P		<p>DRILL SLIDE 3898'- 4828' (930',155'/HR) WEIGHT ON BIT 18-22K. AVERAGE WEIGHT ON BIT 20K. ROTARY RPM 55-60. MUD MOTOR RPM 103. STROKES PER MINUTE 115 GALLONS PER MINUTE 517. ON/OFF PSI 1950/1550. DIFFERENTIAL 400. TORQUE HIGH/LOW 8900/7400. OFF BOTTOM TORQUE 4000 STRING WEIGHT UP/DOWN/ROTATING 119/99/103. DRAG 16K. WELLBORE 11' NORTH AND 5' WEST @ 4801'. SLIDE 45' AT 45'/HR. SLIDE 5% ROTATE 95%. RUNNING 2 CENTRIFUGES AND DE WATERING.( WT 8.5 VIS 28. ) USED 50 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 60 BBLS DRILL WATER INTO FORMATION. (LOSING 10 BBLS HR) PUMP 50 VIS GEL AND 5% SAWDUST SWEEPS TO HELP CONTROL LOSSES. PUMP 15 BBLS SWEEP EVERY 200'. (ADD 120 BBLS OF DRILL WATER TO PITS FOR VOLUME) NO FLARE.</p>

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: XTC 12/12, CAPSTAR 310/310

Event: DRILLING

Start Date: 12/8/2011

End Date: 5/18/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
5/15/2012	0:00 - 5:30	5.50	DRLPRO	02	D	P		<p>DRILL SLIDE 4828'- 5570' (742', 134'/HR) WEIGHT ON BIT 18-22K. AVERAGE WEIGHT ON BIT 20K. ROTARY RPM 60-65. MUD MOTOR RPM 103. STROKES PER MINUTE 115 GALLONS PER MINUTE 517. ON/OFF PSI 2000/1600. DIFFERENTIAL 400. TORQUE HIGH/LOW 8900/7400. OFF BOTTOM TORQUE 4000 STRING WEIGHT UP/DOWN/ROTATING 132/104/107. DRAG 25K. WELLBORE 22' NORTH AND 0' WEST @ 5436'. SLIDE 0' SLIDE 0% ROTATE 100%. RUNNING 2 CENTRIFUGES AND DE WATERING.( WT 8.5 VIS 26. ) USED 40 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 74 BBLS DRILL WATER INTO FORMATION. (LOSING 13 BBLS HR) PUMP 50 VIS GEL AND 5% SAWDUST SWEEPS TO HELP CONTROL LOSSES. PUMP 15 BBLS SWEEP EVERY 200'. (ADD 135 BBLS OF DRILL WATER TO PITS FOR VOLUME) NO FLARE. (ADDING POLY THOUGH OUT WELL TO ATTEMPT TO STABILIZE SHELLS) SERVICE RIG. SERVICE TOP DRIVE. CHECK BRAKES FOR ADJUSTMENT. CHECK EMERGENCY STOP BUTTON.</p>
	5:30 - 6:00	0.50	DRLPRO	07	A	P		

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: XTC 12/12, CAPSTAR 310/310

Event: DRILLING

Start Date: 12/8/2011

End Date: 5/18/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:00 - 12:00	6.00	DRLPRO	02	C	P		<p>DRILL SLIDE 5570'-6303' (733',122'/HR)</p> <p>WEIGHT ON BIT 18-24K. AVERAGE WEIGHT ON BIT 22K.</p> <p>ROTARY RPM 60-65. MUD MOTOR RPM 103.</p> <p>STROKES PER MINUTE 115 GALLONS PER MINUTE 517.</p> <p>ON/OFF PSI 2100/1700. DIFFERENTIAL 400.</p> <p>TORQUE HIGH/LOW 10800/7300. OFF BOTTOM TORQUE 4500</p> <p>STRING WEIGHT UP/DOWN/ROTATING 148/107/119.</p> <p>DRAG 39K.</p> <p>WELLBORE 2' NORTH AND 9' EAST OF CENTER @ 6303'.</p> <p>SLIDE 35' AT 40'/HR</p> <p>SLIDE 5% ROTATE 95%.</p> <p>RUNNING 2 CENTRIFUGES AND DE WATERING.( WT 8.5 VIS 26. )</p> <p>USED 40 BBLS DRILL WATER FOR HOLE VOLUME.</p> <p>LOSS 67 BBLS DRILL WATER INTO FORMATION. (LOSING 11 BBLS HR)</p> <p>PUMP 50 VIS GEL AND 5% SAWDUST SWEEPS TO HELP CONTROL LOSSES. PUMP 15 BBLS SWEEP EVERY 200'. (ADD 65 BBLS OF DRILL WATER TO PITS FOR VOLUME)</p> <p>NO FLARE.</p> <p>(DIFFICULTIES SLIDING WITH 5 BLADE BIT)</p> <p>(ADDING POLY THOUGH OUT WELL TO ATTEMPT TO STABILIZE SHELLS)</p>



**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: XTC 12/12, CAPSTAR 310/310

Event: DRILLING

Start Date: 12/8/2011

End Date: 5/18/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	12:00 - 17:30	5.50	DRLPRO	02	D	P		<p>DRILL SLIDE 6303'-6670' (364',66'/HR)  WEIGHT ON BIT 18-24K. AVERAGE WEIGHT ON BIT 22K.  ROTARY RPM 55-65. MUD MOTOR RPM 103.  STROKES PER MINUTE 115 GALLONS PER MINUTE 517.  ON/OFF PSI 2150/1775. DIFFERENTIAL 375.  TORQUE HIGH/LOW 9600/7400. OFF BOTTOM TORQUE 4600  STRING WEIGHT UP/DOWN/ROTATING 150/118/127.  DRAG 23K.  WELLBORE 4' NORTH AND 7' EAST OF CENTER @ 6670'.  SLIDE 76' AT 30'/HR  SLIDE 21% ROTATE 79%.  RUNNING 2 CENTRIFUGES AND DE WATERING.( WT 8.5 VIS 26. )  USED 20 BBLS DRILL WATER FOR HOLE VOLUME.  LOSS 77 BBLS DRILL WATER INTO FORMATION. (LOSING 6 BBLS HR)  PUMP 50 VIS GEL AND 5% SAWDUST SWEEPS TO HELP CONTROL LOSSES. PUMP 15 BBLS SWEEP EVERY 200'. (ADD 75 BBLS OF FRESH WATER TO PITS FOR TO MAKE SWEEPS)  NO FLARE.  (ADDING POLY THOUGH OUT WELL TO ATTEMPT TO STABILIZE SHELLS)</p> <p>CLEAN, DRIFT, BAG ENDS AND RETURN THREAD PROTECTORS TO PIN ENDS. TALLY CASING. RONNIE WITH TSI ON LOCATION INSPECTING CASING.  NO BAD JTS</p>
	17:30 - 18:00	0.50	DRLPRO	07	A	P		<p>SERVICE RIG. SERVICE TOP DRIVE. CHECK BRAKE ADJUSTMENT. CHECK EMERGENCY STOP BUTTON. FUNCTION PIPE RAMS.</p>

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: XTC 12/12, CAPSTAR 310/310

Event: DRILLING

Start Date: 12/8/2011

End Date: 5/18/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	18:00 - 0:00	6.00	DRLPRO	02	D	P		<p>DRILL SLIDE 6670'- 7257' (587',98'/HR) WEIGHT ON BIT 18-24K. AVERAGE WEIGHT ON BIT 22K. ROTARY RPM 55-65. MUD MOTOR RPM 103. STROKES PER MINUTE 115 GALLONS PER MINUTE 517. ON/OFF PSI 2250/1875. DIFFERENTIAL 375. TORQUE HIGH/LOW 10600/8500. OFF BOTTOM TORQUE 4600 STRING WEIGHT UP/DOWN/ROTATING 167/119/131. DRAG 36K. WELLBORE 9' NORTH AND 5' EAST OF CENTER @ 7257'. SLIDE 0' SLIDE 0% ROTATE 100%. RUNNING 2 CENTRIFUGES AND DE WATERING.( WT 8.5 VIS 26.) USED 31 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 90 BBLS DRILL WATER INTO FORMATION. (LOSING 15 BBLS HR) PUMP 50 VIS GEL AND 5% SAWDUST SWEEPS TO HELP CONTROL LOSSES. PUMP 15 BBLS SWEEP EVERY 200'. (ADD 130 BBLS OF FRESH WATER TO PITS FOR MAKE UP.) NO FLARE. (ADDING POLY THOUGH OUT WELL TO ATTEMPT TO STABILIZE SHELLS)</p>
5/16/2012	0:00 - 0:30	0.50	DRLPRO	02	D	P		<p>DRILL SLIDE 7257'- 7302' ( 45', 90'/HR) WEIGHT ON BIT 18-24K. AVERAGE WEIGHT ON BIT 22K. ROTARY RPM 55-65. MUD MOTOR RPM 103. STROKES PER MINUTE 115 GALLONS PER MINUTE 517. ON/OFF PSI 2250/1875. DIFFERENTIAL 375. TORQUE HIGH/LOW 10600/8500. OFF BOTTOM TORQUE 4600 STRING WEIGHT UP/DOWN/ROTATING 167/119/131. DRAG 36K. WELLBORE 8' NORTH AND 5' EAST OF CENTER @ 7302'. SLIDE 10' @ 30' HR. SLIDE 22% ROTATE 75%. RUNNING 2 CENTRIFUGES AND DE WATERING.( WT 8.5 VIS 26.) USED 2 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 7 BBLS DRILL WATER INTO FORMATION. (LOSING 15 BBLS HR) PUMP 50 VIS GEL AND 5% SAWDUST SWEEPS TO HELP CONTROL LOSSES. PUMP 15 BBLS SWEEP EVERY 200'. NO FLARE. (ADDING POLY THOUGH OUT WELL TO ATTEMPT TO STABILIZE SHELLS)</p>
	0:30 - 1:30	1.00	DRLPRO	22	L	Z		<p>TROUBLE SHOOT MWD TOOLS. PROBLEMS WITH COMMUNICATIONS. SHUT DOWN COMPUTERS. REBOOTED AND REPROGRAMMED TOOLS.</p>

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: XTC 12/12, CAPSTAR 310/310

Event: DRILLING

Start Date: 12/8/2011

End Date: 5/18/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	1:30 - 5:30	4.00	DRLPRO	02	D	P		<p>DRILL SLIDE 7302'- 7538' (236',59'/HR) WEIGHT ON BIT 18-24K. AVERAGE WEIGHT ON BIT 22K. ROTARY RPM 55-65. MUD MOTOR RPM 103. STROKES PER MINUTE 115 GALLONS PER MINUTE 517. ON/OFF PSI 2300/1900. DIFFERENTIAL 400. TORQUE HIGH/LOW 10200/8000. OFF BOTTOM TORQUE 5500 STRING WEIGHT UP/DOWN/ROTATING 158/119/133. DRAG 25K. WELLBORE 4' NORTH AND 5' EAST OF CENTER @ 7538'. SLIDE 47' @ 30' HR. SLIDE 20% ROTATE 80%. RUNNING 2 CENTRIFUGES ON CONVENTIONAL SINCE 7500'. USED 12 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 45 BBLS DRILL WATER INTO FORMATION. (LOSING 11 BBLS HR) PUMP 50 VIS GEL AND 5% SAWDUST SWEEPS TO HELP CONTROL LOSSES. PUMP 15 BBLS SWEEP EVERY 200'. START LIGHT MUD UP @ 7500' TO CONTROL WATER LOSS. MUD IN 8.5/ 29 MUD OUT 8.5/ 25. 5' DRILLING FLARE FROM 7410' (5 MINUTE CONNECTION FLARES 10')- 3854 SCF.</p>
	5:30 - 6:00	0.50	DRLPRO	07	A	P		<p>RIG SERVICE. SERVICE TOP DRIVE. CHECK BRAKE ADJUSTMENTS. TEST EMERGENCY STOP BUTTON.</p>

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: XTC 12/12, CAPSTAR 310/310

Event: DRILLING

Start Date: 12/8/2011

End Date: 5/18/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:00 - 17:30	11.50	DRLPRO	02	D	P		<p>DRILL SLIDE 7538'- 8119' (581', 50'/HR) WEIGHT ON BIT 18-27K. AVERAGE WEIGHT ON BIT 24K. ROTARY RPM 45-65. MUD MOTOR RPM 103. STROKES PER MINUTE 115 GALLONS PER MINUTE 517. ON/OFF PSI 2225/1900. DIFFERENTIAL 325. TORQUE HIGH/LOW 10400/8000. OFF BOTTOM TORQUE 7600 STRING WEIGHT UP/DOWN/ROTATING 188/121/142. DRAG 48K. WELLBORE 3' NORTH AND 1' EAST OF CENTER @ 8119'. SLIDE 20' @ 30' HR. SLIDE 3% ROTATE 97%. LAST SLIDE @ 7595' RUNNING 2 CENTRIFUGES ON CONVENTIONAL SINCE 7500'. USED 31 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 75 BBLS DRILL WATER INTO FORMATION. (LOSING 6 BBLS HR) (ADD 100 BBLS OF DRILL WATER INTO MUD TANKS FOR MAKE UP) DRILLING WITH LIGHT MUD IN 8.5/ 32 MUD OUT 8.6/ 31. FLARE DIED DOWN TO 2' CONNECTION FLARE FOR A FEW CONNECTIONS AND THEN WENT OUT. 120 SCF. BIT ONLY AVERAGING 45'/HR FROM 7800', BUT STAYING PRETTY CONSISTENT.</p>
	17:30 - 18:00	0.50	DRLPRO	07	A	P		<p>RIG SERVICE. SERVICE TOP DRIVE. SERVICE CROWN.CHECK GENERATORS. CHECK BRAKE ADJUSTMENTS. TEST EMERGENCY STOP BUTTON.</p>

## US ROCKIES REGION

## Operation Summary Report

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: XTC 12/12, CAPSTAR 310/310

Event: DRILLING

Start Date: 12/8/2011

End Date: 5/18/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	18:00 - 0:00	6.00	DRLPRO	02	D	P		<p>DRILL SLIDE 8119'- 8391' (272',45'/HR) WEIGHT ON BIT 18-28K. AVERAGE WEIGHT ON BIT 25K. ROTARY RPM 45-65. MUD MOTOR RPM 103. STROKES PER MINUTE 115 GALLONS PER MINUTE 517. ON/OFF PSI 2500/2100. DIFFERENTIAL 400. TORQUE HIGH/LOW 10200/8800. OFF BOTTOM TORQUE 6200 STRING WEIGHT UP/DOWN/ROTATING 188/130/143. DRAG 45K. WELLBORE 1' NORTH AND 4' EAST OF CENTER @ 8341'. SLIDE 0' SLIDE 0% ROTATE 100%. RUNNING 2 CENTRIFUGES USED 15 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 15 BBLS DRILL WATER INTO FORMATION. (LOSING 2 BBLS HR) (ADD 40 BBLS OF FRESH WATER INTO MUD TANKS FOR MAKE UP) DRILLING WITH LIGHT MUD IN 8.5/ 37 MUD OUT 8.7/ 34. NO FLARE. BIT ONLY AVERAGING 45'/HR FROM 7800', BUT STAYING PRETTY CONSISTENT.</p> <p>(SENT 260 BBLS 11.5 MUD TO ENSIGN 138 TO HELP WITH THEIR LOSSES)</p>
5/17/2012	0:00 - 2:30	2.50	DRLPRO	02	D	P		<p>DRILL SLIDE 8391'-8482' (91'36'/HR) WEIGHT ON BIT 18-28K. AVERAGE WEIGHT ON BIT 25K. ROTARY RPM 45-65. MUD MOTOR RPM 103. STROKES PER MINUTE 115 GALLONS PER MINUTE 517. ON/OFF PSI 2500/2100. DIFFERENTIAL 400. TORQUE HIGH/LOW 9700/8500. OFF BOTTOM TORQUE 6200 STRING WEIGHT UP/DOWN/ROTATING 189/130/143. DRAG 46K. WELLBORE 0' NORTH AND 5' EAST OF CENTER @ 8482'. SLIDE 0' SLIDE 0% ROTATE 100%. PUT CENTRIFUGES ON BY PASS. @ 8410' AND START WEIGHTED MUD UP. DISPLACE IN 530 BBLS OF HEAVY MUD INTO MUD SYSTEM. DISPLACE OUT 500 BBL OF 8.4# MUD INTO UPRIGHTS. MUD AFTER DISPLACEMENT MUD IN 10.4/ 39 MUD OUT 10.0/37. NO LOSSES AFTER MUD UP. NO FLARE.</p>
	2:30 - 3:00	0.50	DRLPRO	07	A	P		<p>RIG SERVICE. SERVICE TOP DRIVE. CHECK BRAKE ADJUSTMENT AND TEST EMERGENCY STOP BUTTON. CHECK GENERATORS.</p>



**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

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Site: BONANZA 1023-6K PAD

Rig Name No: XTC 12/12, CAPSTAR 310/310

Event: DRILLING

Start Date: 12/8/2011

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Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	3:00 - 5:30	2.50	DRLPRO	02	D	P		<p>DRILL SLIDE 8482'-8584' (102',41'/HR) WEIGHT ON BIT 18-28K. AVERAGE WEIGHT ON BIT 25K. ROTARY RPM 45-65. MUD MOTOR RPM 90. STROKES PER MINUTE 105 GALLONS PER MINUTE 450. ON/OFF PSI 2700/2500. DIFFERENTIAL 200. TORQUE HIGH/LOW 9800/7300. OFF BOTTOM TORQUE 6400 STRING WEIGHT UP/DOWN/ROTATING 176/135/143. DRAG 33K. WELLBORE 4' SOUTH AND 6' EAST OF CENTER @ 8584'. SLIDE 0' SLIDE 0% ROTATE 100%. WORK ON RAISING MUD WT TO 11.4 FOR WIPER TRIP. (RAISING MUD WT TO HELP LOGS TO BOTTOM). MUD IN 11.3/ 41 MUD OUT 11.1/39. LOSS ALL CIRCULATION @ 8584'. LOST 15 BBLS. 5' FLARE FROM RIG SERVICE DOWN TIME. 10 MIN. -298 SCF</p>
	5:30 - 6:30	1.00	DRLPRO	22	G	X		<p>SHUT DOWN AND KEPT PIPE MOVING UP AND DOWN. MIXED 10% LCM IN SUCTION PIT. STARTED DOWN MUD @ 180 GPM. RAISED PIPE UP QUICKLY AND THEN LOWERED PIPE SLOWLY TO CREATE SWABBING ACTION. REGAINED PARTIAL RETURNS AFTER PUMPING 85 BBLS. CONTINUED MIXING LCM WHILE PUMPING DOWN HOLE. TRANSFERED IN 135 BBLS OF LIGHT MUD INTO SYSTEM FOR VOLUME. REGAINED FULL CIRCULATION WITH A TOTAL LOSS OF 120 BBLS. STAGED UP PUMP TO 90 SPM (405 GPM). MONITORED FOR LOSSES. MUD IN 10.5/ 38 MUD OUT 11.1/40 OUT. NO FLARE</p>

**US ROCKIES REGION**  
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Well: BONANZA 1023-6K2CS GREEN

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UWI: NE/SW0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:30 - 8:00	1.50	DRLPRO	02	D	P		DRILL SLIDE 8584'- 8614' (30, 20'/HR) TD 5/17/2012 08:00. WEIGHT ON BIT 18-28K. AVERAGE WEIGHT ON BIT 25K. ROTARY RPM 45-65. MUD MOTOR RPM 90. STROKES PER MINUTE 105 GALLONS PER MINUTE 450. ON/OFF PSI 2700/2500. DIFFERENTIAL 200. TORQUE HIGH/LOW 8300/7500. OFF BOTTOM TORQUE 6500 STRING WEIGHT UP/DOWN/ROTATING 178/135/143. DRAG 35K. WELLBORE 5' SOUTH AND 7' EAST OF CENTER @ TD'. SLIDE 0' SLIDE 0% ROTATE 100%. RAISE MUD WT BACK TO 11.3 WHILE DRILLING. CATCH LIGHT SPOT AND RAISE MUD WT OF LIGHT SPOT. SWEEP HOLE WITH LCM EVERY 15 MIN. MUD IN 11.2/40 MUD OUT 11.3/38 OUT. NO FLARE.
	8:00 - 9:30	1.50	EVALPR	05	A	P		CIRCULATE UP BOTTOMS UP. PUMP LCM SWEEP TO HELP CONTROL LOSSES AND CLEAN HOLE. NO LOSSES. NO FLARES. MUD IN 11.3/40 MUD OUT 11.3/39 OUT. MIX 60 BBL 13.# PILL AND HOLD FOR DRY JOBS. CHECK FOR FLOW.
	9:30 - 13:30	4.00	EVALPR	06	E	P		WIPER TRIP TO SHOE. PULL OFF BOTTOM WITH 50K OVER. PULL 2 JTS AND PUMP 30 BBLS 13# DRY JOB. TRIP OUT WITH TIGHT HOLE AT 7700'. WASH THROUGH TIGHT SPOT AT 5400'. HOLE TAKING PROPER FLUID ON TRIP. NO FLOW ON FLOW CHECKS.
	13:30 - 14:30	1.00	EVALPR	09	A	P		SLIP AND CUT DRILL LINE. CHECK BRAKE ADJUSTMENT.
	14:30 - 17:30	3.00	EVALPR	06	E	P		TRIP IN HOLE. WASH THROUGH BRIDGE AT 4027', 5234'. TRIP IN WITH GOOD DISPLACEMENT. NO FLOW ON FLOW CHECKS.
	17:30 - 18:00	0.50	EVALPR	07	A	P		RIG SERVICE. SERVICE TOP DRIVE. CHECK BRAKE ADJUSTMENT. TEST EMERGENCY STOP BUTTON.
	18:00 - 20:30	2.50	EVALPR	06	E	P		CONTINUE TRIPPING IN HOLE AND WASH THROUGH BRIDGES AT 5712', 6720', 7758'-7784', 8328'. TRIP TO BOTTOM. 15' FILL ON BOTTOM OF HOLE. GOOD DISPLACEMENT DURING TRIP. NO FLOW ON FLOW CHECKS. NO LOSSES ON TRIP.
	20:30 - 23:00	2.50	EVALPR	05	A	P		CIRC AND CONDITION HOLE. RAISE MUD WT TO 11.4+TO HELP KEEP HOLE OPEN. SWEEP HOLE WITH LCM SWEEPS TO HELP CONTROL LOSSES AND TO HELP CLEAN HOLE. NO FLARE ON BOTTOMS UP. MONITOR RETURNS FOR ABNORMAL CUTTINGS. (NO ABNORMAL CUTTING SIZES). RETURNS CLEANED UP OVER SHAKER. MIX DRY 30 BBL 13# DRY JOB AND HOLD. NO FLOW ON FLOW CHECK.

**US ROCKIES REGION**  
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Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

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Rig Name No: XTC 12/12, CAPSTAR 310/310

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UWI: NE/SW/0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	23:00 - 0:00	1.00	EVALPR	06	B	P		PULL STRAIGHT OFF BOTTOM TO 8200. PUMP DRY JOB. TRIP OUT FOR LOGS. (SLIGHTLY STICKY SPOT @ 7600'), PULLING PIPE @ 7000' @ REPORT TIME. HOLE IS TAKING PROPER FLUID AND THERE IS NO FLOW ON FLOW CHECKS.
5/18/2012	0:00 - 4:00	4.00	EVALPR	06	B	P		CONTINUE TRIPPING OUT OF HOLE FROM 7000'. HOLE PULLING SLICK. HOLE TAKING PROPER FLUID TO FILL. NO FLOW ON FLOW CHECKS. PULL ROTATING HEAD RUBBER AT HEAVY WEIGHT DRILL PIPE. TRIP OUT HEAVY WEIGHT DRILL PIPE LAY DOWN DIRECTIONAL TOOLS. BREAK BIT AND LAY DOWN MUD MOTOR. BIT WAS DAMAGED BEYOND REPAIR.
	4:00 - 10:00	6.00	EVALPR	11	D	P		HOLD SAFETY MEETING WITH HALLIBURTON LOGGERS. RIG UP LOGGERS AND PICK UP TRIPLE COMBO TOOLS. RUN IN HOLE AND LOG FROM 8580'-2455'. LAY DOWN TOOLS AND RIG DOWN LOGGERS.
								(CLEAN PITS WITH JET HOSE AND RUN MUD OVER SHAKERS TO CLEAN OUT FINE SOLIDS WHILE LOGGING.)
	10:00 - 10:30	0.50	EVALPR	14	B	P		PICK UP BUSHING PULLER AND PULL CAMERON WEAR BUSHING. LAY DOWN BUSHING PULLER.
	10:30 - 11:00	0.50	CSGPRO	12	A	P		HOLD SAFETY MEETING WITH KIMZEY CASING CREW. REMOVE RIG ELEVATORS. RIG DOWN RIG MAKE UP TONGES. INSTALL CASING ELEVATORS AND INTERGRATED TONGES.

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: XTC 12/12, CAPSTAR 310/310

Event: DRILLING

Start Date: 12/8/2011

End Date: 5/18/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	11:00 - 17:30	6.50	CSGPRO	12	C	P		<p>(INSPECT FLOAT EQUIPMENT)</p> <p>MAKE UP 4.5" K-55 LTC WEATHERFORD FLOAT SHOE ON SHOE JT WITH THREAD LOCK. MAKE UP 4.5" K-55 FLOAT COLLAR W/ THREAD LOCK ON TOP OF SHOE JT.</p> <p>RUN CENTRALIZERS ON FIRST 3 JTS AND EVERY THIRD JT FOR TOTAL OF 15 CENTRALIZERS. BREAK CIRCULATION @ 840'. NO PROBLEMS WITH FLOAT SHOE OR COLLAR.</p> <p>RUN A TOTAL OF 84 JTS OF 4.5" 11.6# I-80 LTC CASING (3566.35'). MAKE UP DQX CROSS OVER JT AND RIG UP TORQUE TURN. PERFORM DUMP TEST.</p> <p>RUN A TOTAL 116 JTS OF 4.5" 11.6# I-80 DQX CSG WITH TORQUE TURN (5021'). (TSI HAND WITNESSED CSG JOB).</p> <p>FILLED CASING AND CIRCULATED AT 840' AND 4400'. GOOD CIRCULATION WITH NO LOSSES WAS ESTABLISHED.</p> <p>WASH DOWN LAST JT AND LANDING JT. 10' FILL ON BOTTOM. LANDED CASING ON CAMERON SLOTTED MANDREL WITH LANDING JT.</p> <p>TOTAL OF 84 JTS OF 4.5" 11.6# I-80 LTC (3566.35') TOTAL 116 JTS OF 4.5" 11.6# I-80 DQX CSG (5021')</p> <p>LAND FLOAT SHOE @ 8602.5' KB LAND TOP OF FLOAT COLLAR @ 8557.73' KB. LAND TOP OF MESA MARKER JT @ 6386 KB. LAND TOP DQX TO LTC CROSS OVER JT @ 5015.2' KB.</p>
	17:30 - 18:30	1.00	CSGPRO	05	D	P		<p>CIRCULATE DOWN CASING WITH RIG. GOOD CIRCULATION WITH NO LOSSES @ 363 GALLONS PER MINUTE. 15' FLARE FOR 15 MIN ON BOTTOMS UP. - 4196 SCF. MUD WT 11.4 VIS 40. RIG DOWN KIMZEY CASING. HOLD SAFETY MEETING WITH BAKER HUGHES CEMENTERS.</p>

## US ROCKIES REGION

## Operation Summary Report

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: XTC 12/12, CAPSTAR 310/310

Event: DRILLING

Start Date: 12/8/2011

End Date: 5/18/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	18:30 - 21:30	3.00	CSGPRO	12	E	P		RIG UP CEMENT HEAD WITH WEATHERFORD TOP PLUG INSTALLED. PRESSURE TEST LINES TO 5000 PSI. PUMP 25 BBLS OF FRESH WATER. PUMP 161 BBLS (400 SX) OF 12.0# 2.26 YIELD 12.48 GAL/SK OF LEAD CEMENT. PUMP 277 BBLS (1186SX) OF 14.3# 1.31 YIELD 5.91 GAL/SK POZ 50/50 TAIL CEMENT. SHUT DOWN AND FLUSH LINES. DROP TOP PLUG DISPLACE WITH 132.7 BBLS OF FRESH WATER TREATED WITH CLAYFIX AND MAGNACIDE. LOSS ALL RETURNS WITH 33 BBLS LEFT IN DISPLACEMENT. SLOWED PUMP RATE TO 3 BBLS/MIN BUT DID NOT REGAIN RETURNS. 2300 LIFT PSI @ 3 BBLS MIN. (HOLE STAYED FULL) BUMP PLUG 2800 PSI. PRESSURE HELD 5 MINUTES. FLOAT HELD. FLOW BACK 1.5 BBLS. ESTIMATED TOP OF CEMENT FOR LEAD 700'. ESTIMATED TOP OF CEMENT FOR TAIL 3780'. STORED 700 BBLS OF 11.5# MUD. TRANSFERED 260 BBLS OF MUD TO ENSIGN 138. RIG DOWN CEMENTERS. FLUSH STACK WITH FRESH WATER.
	21:30 - 23:00	1.50	RDMO	14	A	P		UNSCREW LANDING JT. RUN IN WITH PACK OFF. TURN IN LANDING DOGS. UNSCREW FROM PACK OFF. LAYDOWN LANDING JT. UNDO FLOW LINE. NIPPLE DOWN BOPE. TAKE OFF WELL HEAD ADAPTER AND SEND IN WITH CAMERON HAND. UNDO CHOKE LINE. P/U STACK. AND COVER WELL. RELEASE RIG 5/18/2012 23:00.



## 1 General

### 1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

### 1.2 Well/Wellbore Information

Well	BONANZA 1023-6K2CS GREEN	Wellbore No.	OH
Well Name	BONANZA 1023-6K2CS	Wellbore Name	BONANZA 1023-6K2CS
Report No.	1	Report Date	8/9/2012
Project	UTAH-UINTAH	Site	BONANZA 1023-6K PAD
Rig Name/No.		Event	COMPLETION
Start Date	8/9/2012	End Date	8/24/2012
Spud Date	3/20/2012	Active Datum	RKB @5,234.00usft (above Mean Sea Level)
UWI	NE/SW/0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0		

### 1.3 General

Contractor		Job Method		Supervisor	
Perforated Assembly		Conveyed Method			

### 1.4 Initial Conditions

Fluid Type		Fluid Density		Gross Interval	5,687.0 (usft)-8,470.0 (usft)	Start Date/Time	8/9/2012 12:00AM
Surface Press		Estimate Res Press		No. of Intervals	36	End Date/Time	8/9/2012 12:00AM
TVD Fluid Top		Fluid Head		Total Shots	192	Net Perforation Interval	48.00 (usft)
Hydrostatic Press		Press Difference		Avg Shot Density	4.00 (shot/ft)	Final Surface Pressure	
Balance Cond	NEUTRAL					Final Press Date	

### 1.5 Summary

## 2 Intervals

### 2.1 Perforated Interval

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
8/9/2012 12:00AM	WASATCH/			5,687.0	5,688.0	4.00		0.360	EXP/	3.375	90.00			23.00 PRODUCTION	N

## 2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
8/9/2012 12:00AM	WASATCH/			5,699.0	5,700.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	WASATCH/			5,719.0	5,722.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	WASATCH/			5,902.0	5,903.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	WASATCH/			6,087.0	6,088.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	WASATCH/			6,151.0	6,153.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	WASATCH/			6,344.0	6,345.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	WASATCH/			6,408.0	6,410.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,105.0	7,106.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,133.0	7,134.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,173.0	7,174.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,203.0	7,204.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,230.0	7,231.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,259.0	7,260.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,397.0	7,398.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,429.0	7,430.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,476.0	7,478.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,524.0	7,525.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,556.0	7,557.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,661.0	7,662.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,684.0	7,685.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,699.0	7,700.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

## 2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-T S (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diamete r (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
8/9/2012 12:00AM	MESAVERDE/			7,763.0	7,766.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,813.0	7,815.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,848.0	7,850.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,895.0	7,897.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			7,979.0	7,980.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			8,011.0	8,012.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			8,079.0	8,080.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			8,088.0	8,089.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			8,113.0	8,114.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			8,147.0	8,148.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			8,407.0	8,408.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			8,421.0	8,424.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			8,456.0	8,457.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	
8/9/2012 12:00AM	MESAVERDE/			8,469.0	8,470.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTIO N	

## 3 Plots

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: ROCKY MOUNTAIN WELL SERVICE  
3/3

Event: COMPLETION

Start Date: 8/9/2012

End Date: 8/24/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
3/20/2012	-							
8/9/2012	14:00 - 15:30	1.50	COMP	33	C	P		FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 12 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 44 PSI. 1ST PSI TEST T/ 7000 PSI. HELD FOR 30 MIN LOST 62 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. MOVE T/ NEXT WELL. SWFW
8/10/2012	7:00 - 10:00	3.00	COMP	37		P		PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF AS PER PERF DESIGN. POOH. SWFW
8/13/2012	6:45 - 7:00	0.25	FRAC	48		P		JSA-SAFETY MEETING

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: ROCKY MOUNTAIN WELL SERVICE  
3/3

Event: COMPLETION

Start Date: 8/9/2012

End Date: 8/24/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:00 - 18:00	11.00	FRAC	36	E	P		<p>FRAC STG 1) WHP 4555 PSI, BRK 4555 PSI @ 9.1 BPM. ISIP 2419 PSI, FG = 0.72. CALC PERFS OPEN @ 50.6 BPM @ 4550 PSI = 71% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2489 PSI, FG = 0.73, NPI = 70 PSI. MP 4533 PSI, MR 50.8 BPM, AP 4185 PSI, AR 49.9 BPM, PUMPED 30/50 OWATTA SAND. SWI, X-OVER FOR WL.</p> <p>PERF STG 2)PU 4 1/2 8K HAL CBP &amp; 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 8178' P/U PERF AS PER DESIGN. POOH, X-OVER FOR FRAC CREW.</p> <p>FRAC STG 2) WHP 2111 PSI, BRK 4511 PSI @ 9.6 BPM. ISIP 2558 PSI, FG = 0.75. CALC PERFS OPEN @ 51 BPM @ 4302 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2411 PSI, FG = 0.73, NPI = - 147 PSI. MP 6185 PSI, MR 51.2 BPM, AP 4408 PSI, AR 48.8 BPM, PUMPED 30/50 OWATTA SAND. SWI, X-OVER FOR WL.</p> <p>PERF STG 3)PU 4 1/2 8K HAL CBP &amp; 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7927' P/U PERF AS PER DESIGN. POOH, X-OVER FOR FRAC CREW.</p> <p>FRAC STG 3) WHP = 1221 PSI, BRK 7100 PSI @ 8.1 BPM. ISIP = 2324 PSI, FG = 0.73. CALC PERFS OPEN @ 50.7 BPM @ 4442 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2307 PSI, FG = 0.73, NPI = - 17 PSI. MP 4667 PSI, MR 51.5 BPM, AP 4317 PSI, AR 50.9 BPM, PUMPED 30/50 OWATTA SAND. SWI, X-OVER FOR WL.</p> <p>PERF STG 4)PU 4 1/2 8K HAL CBP &amp; 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7796' P/U PERF AS PER DESIGN. POOH, SWIFN.</p> <p>FRAC STG 4) WHP 1585 PSI, BRK 2545 PSI @ 9.5 BPM. ISIP 2015 PSI, FG = 0.69. CALC PERFS OPEN @ 51 BPM @ 4201 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2461 PSI, FG = 0.75, NPI = 446 PSI. MP 4483 PSI, MR 52.8 BPM, AP 4129 PSI, AR 51.4 BPM, PUMPED 30/50 OWATTA SAND. SWI, X-OVER FOR WL.</p>

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: ROCKY MOUNTAIN WELL SERVICE  
3/3

Event: COMPLETION

Start Date: 8/9/2012

End Date: 8/24/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
8/14/2012	6:30 - 6:45	0.25	FRAC	48		P		PERF STG 5)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7587' P/U PERF AS PER DESIGN. POOH, X-OVER FOR FRAC CREW. JSA-SAFETY MEETING



**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: ROCKY MOUNTAIN WELL SERVICE  
3/3

Event: COMPLETION

Start Date: 8/9/2012

End Date: 8/24/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
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6:45 - 15:00

8.25

FRAC

36

E

P

FRAC STG 5) WHP = 1298 PSI, BRK 4394 PSI @ 4.7 BPM. ISIP = 2365 PSI, FG = 0.75.  
CALC PERFS OPEN @ 48.5 BPM @ 3001 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN)  
ISIP 1838 PSI, FG = 0.68, NPI = - 529 PSI.  
MP 3496 PSI, MR 53.2 BPM, AP 3359 PSI, AR 51.5 BPM,  
PUMPED 30/50 OWATTA SAND. SWI, X-OVER FOR WL.

PERF STG 6)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7290' P/U PERF AS PER DESIGN. POOH, SWIFN.

FRAC STG 6) WHP = 270 PSI, BRK 6748 PSI @ 8.5 BPM. ISIP = 2196 PSI, FG = 0.74.  
CALC PERFS OPEN @ 53 BPM @ 3928 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN)  
ISIP 2194 PSI, FG = 0.74, NPI = - 2 PSI.  
MP 4165 PSI, MR 53.1 BPM, AP 3786 PSI, AR 52.9 BPM,  
PUMPED 30/50 OWATTA SAND. SWI, X-OVER FOR WL.

PERF STG 7)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 6440' P/U PERF AS PER DESIGN. POOH, SWIFN.

FRAC STG 7) WHP = 222 PSI, BRK 2756 PSI @ 4.7 BPM. ISIP = 1761 PSI, FG = 0.71.  
CALC PERFS OPEN @ 53 BPM @ 3810 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN)  
ISIP 2160 PSI, FG = 0.78, NPI = 400 PSI.  
MP 4710 PSI, MR 53.2 BPM, AP 3630 PSI, AR 52.9 BPM,  
PUMPED 30/50 OWATTA SAND. SWI, X-OVER FOR WL.

PERF STG 8)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 5933' P/U PERF AS PER DESIGN. POOH, SWIFN.

FRAC STG 8) WHP = 202 PSI, BRK 2632 PSI @ 4.7 BPM. ISIP = 1238 PSI, FG = 0.65.  
CALC PERFS OPEN @ 53 BPM @ 3075 PSI = 100% HOLES OPEN. (24/24 HOLES OPEN)  
ISIP 1396 PSI, FG = 0.67, NPI = 158 PSI.  
MP 3234 PSI, MR 53.4 BPM, AP 2795 PSI, AR 53.3 BPM,  
PUMPED 30/50 OWATTA SAND. SWI, X-OVER FOR WL.

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: ROCKY MOUNTAIN WELL SERVICE  
3/3

Event: COMPLETION

Start Date: 8/9/2012

End Date: 8/24/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
								KILL PLUG ) RIH W/ HALLIBURTON 8K CBP, SET CBP @ 5637', R/D WIRELINE AND FRAC CREW, WELL SHUT IN,
								TOTAL WATER = 7,837 BBLS TOTAL SAND = 163,400# SAND
8/23/2012	12:00 - 17:00	5.00	DRLOUT	31	I	P		MIRU, NDWH, NUBOP, PU 3 7/8" BIT, POBS, & XN SN, RIH W/ 177 JTS 2 3/8" L-80 TBG OFF FLOAT TAG
								FILL @ 5,607', PRESS TEST BOP TO 3,000 PSI LOST
8/24/2012	7:00 - 7:15	0.25	DRLOUT	48		P		0 PSI IN 15 MIN, SWFBN HSM-JSA

**US ROCKIES REGION**  
**Operation Summary Report**

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Spud Date: 3/20/2012

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Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 15:00	7.75	DRLOUT	44	C	P		RU PWR SWMVEL, BRK CIRC
								C/O 30' SAND TAG PLUG #1 @ 5,637', DRL HAL 8K CBP IN 5 MIN, 75 PSI INC, FCP 25 PSI, RIH TAG FILL @ 5,903'.
								C/O 30' SAND TAG PLUG #2 @ 5,933', DRL HAL 8K CBP IN 6 MIN, 50 PSI INC, FCP 50 PSI, RIH TAG FILL @ 6,410.
								C/O 30' SAND TAG PLUG #3 @ 6,440', DRL HAL 8K CBP IN 4 MIN, 200 PSI INC, FCP 150 PSI, RIH TAG FILL @ 7,260.
								C/O 30' SAND TAG PLUG #4 @ 7,290', DRL HAL 8K CBP IN 4 MIN, 400 PSI INC, FCP 450 PSI, RIH TAG FILL @ 7,557'.
								C/O 30' SAND TAG PLUG #5 @ 7,587', DRL HAL 8K CBP IN 5 MIN, 100 PSI INC, FCP 500PSI, RIH TAG FILL @ 7,766'.
								C/O 30' SAND TAG PLUG #6 @ 7,796', DRL HAL 8K CBP IN 6 MIN, 200 PSI INC, FCP 500 PSI, RIH TAG FILL @ 7,897'.
								C/O 30' SAND TAG PLUG #7 @ 7,927', DRL HAL 8K CBP IN 5 MIN, 100 PSI INC, FCP 450 PSI, RIH TAG FILL @ 8,148'.
								C/O 30' SAND TAG PLUG #8 @8,178', DRL HAL 8K CBP IN 4 MIN, 100 PSI INC, FCP 450 PSI, RIH TAG FILL @ 8,508'.
								C/O 50' SAND TO PBTD @ 8,558', CIRC WELL CLEAN, RD PWR SWMVEL, POOH LD 19 JTS TBG ON FLOAT, LAND TBG W/ 250 JTS 2 3/8" L-80 EOT @ 7,953.05', RD FLOOR & TBG EQUIP, NDBOP, NUWH, DROP BALL POBS @ 1,800 PSI, LET BIT FALL 30 MIN TURN OVER TO FBC, SITP 300 PSI, SICP 2,000 PSI, RDMO, MIRU ON 1023-6E3AS, SDFWE.
								KB-15' HANGER-.83' 250 JTS 2 3/8" L-80-7,935.02' POBS-2.20 EOT @ 7,953.05'
								DEL 283 JTS USED 250 JTS RET 33 JTS
								TWTR=8,236 BBLS TWR=2,122 BBLS TWLTR=6,114 BBLS

**US ROCKIES REGION**  
**Operation Summary Report**

Well: BONANZA 1023-6K2CS GREEN

Spud Date: 3/20/2012

Project: UTAH-UINTAH

Site: BONANZA 1023-6K PAD

Rig Name No: ROCKY MOUNTAIN WELL SERVICE  
3/3

Event: COMPLETION

Start Date: 8/9/2012

End Date: 8/24/2012

Active Datum: RKB @5,234.00usft (above Mean Sea Level)

UWI: NE/SW/0/10/S/23/E/6/0/0/26/PM/S/1888/W/0/1720/0/0

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	15:00 - 15:00	0.00	DRLOUT	50				WELL TURNED TO SALES @ 1300 HR ON 8/24/2012. 2500 MCFD, 1920 BWPD, FCP 2000#, FTP 1900#, 20/64" CK.
8/25/2012	-							
8/26/2012	7:00 -			50				WELL IP'D ON 8/26/12 - 2276 MCFD, 0 BWPD, 0 BOPD, CP 2192#, FTP 1523#, LP 154#, 24 HRS, CK 20/64
8/27/2012	-							

Project: UTAH - UTM (feet), NAD27, Zone 12N  
 Site: UTAH\_BONANZA 1023-6K PAD  
 Well: BONANZA 1023-6K2CS  
 Wellbore: BONANZA 1023-6K2CS  
 Section:  
 SHL:  
 Design: BONANZA 1023-6K2CS (wp01)  
 Latitude: 39.975891  
 Longitude: -109.371995  
 GL: 5219.00  
 KB: 5219' GL + 15' RKB @ 5234.00ft

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4244.00	4274.87	WASATCH
4844.00	4874.87	top of cylinder
6398.00	6428.89	MESAVERDE
8574.00	8604.91	SEGO

#### WELL DETAILS: BONANZA 1023-6K2CS

+N/-S	+E/-W	Northing	Easting	Ground Level:	Latitude	Longitude	Slot
0.00	0.00	14521429.23	2096524.13	5219.00	39.975891	-109.371995	

#### CASING DETAILS

TVD	MD	Name	Size
2424.47	2451.77	8-5/8"	8-5/8



Azimuths to True North  
 Magnetic North: 10.91°

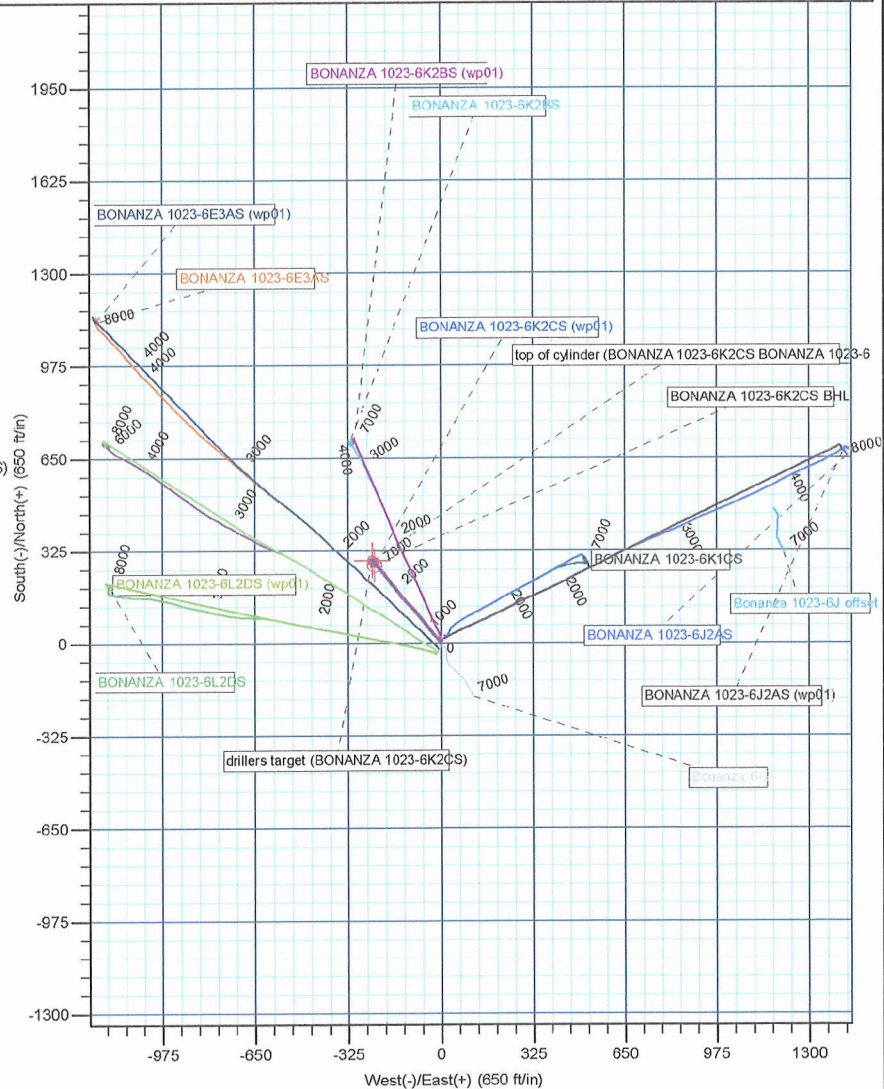
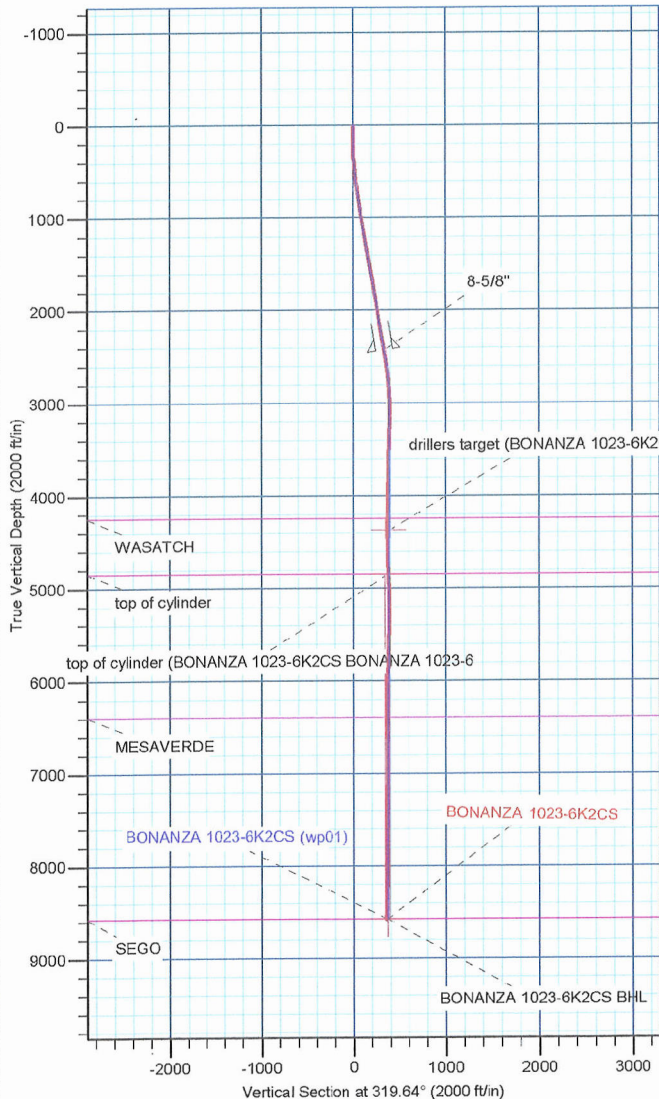
Magnetic Field  
 Strength: 52249.3nT  
 Dip Angle: 65.85°  
 Date: 4/12/2012  
 Model: IGRF2010

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
drillers target (BONANZA 1023-6K2CS)	4374.00	292.34	-241.98	14521717.10	2096276.85	39.976694	-109.372859	Circle (Radius: 15.00)
top of cylinder (BONANZA 1023-6K2CS BONANZA 1023-6)	4834.600	290.60	-241.16	14521715.38	2096277.71	39.976689	-109.372856	Point
BONANZA 1023-6K2CS BHL	8574.00	275.35	-233.98	14521700.26	2096285.16	39.976647	-109.372830	Circle (Radius: 25.00)

#### SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
2415.00	9.32	321.44	2388.19	251.03	-206.18	0.00	0.00	324.80
2565.00	9.32	321.44	2536.21	270.03	-221.32	0.00	0.00	349.08
3047.39	0.34	155.71	3016.55	299.34	-245.14	2.00	-179.50	386.85
4292.23	0.34	155.71	4261.36	292.65	-242.12	0.00	0.00	379.79
4404.87	0.00	0.00	4374.00	292.35	-241.98	0.30	180.00	379.47
4491.17	0.26	154.81	4460.31	292.17	-241.90	0.30	154.81	379.28
8604.91	0.26	154.81	8574.00	275.35	-233.98	0.00	0.00	361.34



# **US ROCKIES REGION PLANNING**

**UTAH - UTM (feet), NAD27, Zone 12N**

**UINTAH\_BONANZA 1023-6K PAD**

**BONANZA 1023-6K2CS**

**BONANZA 1023-6K2CS**

**Design: BONANZA 1023-6K2CS**

## **Standard Survey Report**

**04 September, 2012**



# Andarko Petroleum Corporation

## Survey Report

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well BONANZA 1023-6K2CS
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	5219' GL + 15' RKB @ 5234.00ft
<b>Site:</b>	UINTAH_BONANZA 1023-6K PAD	<b>MD Reference:</b>	5219' GL + 15' RKB @ 5234.00ft
<b>Well:</b>	BONANZA 1023-6K2CS	<b>North Reference:</b>	True
<b>Wellbore:</b>	BONANZA 1023-6K2CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	BONANZA 1023-6K2CS	<b>Database:</b>	edmp

<b>Project</b>	UTAH - UTM (feet), NAD27, Zone 12N		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		

<b>Site</b>	UINTAH_BONANZA 1023-6K PAD				
<b>Site Position:</b>		<b>Northing:</b>	14,521,392.52 usft	<b>Latitude:</b>	39.975791
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,096,508.54 usft	<b>Longitude:</b>	-109.372053
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	1.05 °

<b>Well</b>	BONANZA 1023-6K2CS					
<b>Well Position</b>	+N/-S	0.00 ft	<b>Northing:</b>	14,521,429.24 usft	<b>Latitude:</b>	39.975891
	+E/-W	0.00 ft	<b>Easting:</b>	2,096,524.13 usft	<b>Longitude:</b>	-109.371995
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	5,219.00 ft

<b>Wellbore</b>	BONANZA 1023-6K2CS				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
	IGRF2010	4/12/2012	(°)	(°)	(nT)
			10.91	65.85	52,249

<b>Design</b>	BONANZA 1023-6K2CS				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	6.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(ft)	(ft)	(ft)	(°)	
	6.00	0.00	0.00	320.10	

<b>Survey Program</b>	<b>Date</b>	7/5/2012			
<b>From</b>	<b>To</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
(ft)	(ft)				
236.00	2,415.00	Survey #1 (BONANZA 1023-6K2CS)	MWD	MWD - STANDARD	
2,532.00	8,614.00	Survey #2 (BONANZA 1023-6K2CS)	MWD	MWD - STANDARD	

<b>Survey</b>									
<b>Measured</b>	<b>Inclination</b>	<b>Azimuth</b>	<b>Vertical</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Vertical</b>	<b>Dogleg</b>	<b>Build</b>	<b>Turn</b>
<b>Depth</b>	<b>(°)</b>	<b>(°)</b>	<b>Depth</b>	<b>(ft)</b>	<b>(ft)</b>	<b>Section</b>	<b>Rate</b>	<b>Rate</b>	<b>Rate</b>
<b>(ft)</b>			<b>(ft)</b>			<b>(ft)</b>	<b>(°/100usft)</b>	<b>(°/100usft)</b>	<b>(°/100usft)</b>
6.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00
236.00	0.18	143.37	236.00	-0.29	0.22	-0.36	0.08	0.08	0.00
328.00	1.09	342.62	327.99	0.43	0.04	0.30	1.37	0.99	-174.73
417.00	3.29	323.05	416.93	3.28	-1.75	3.64	2.58	2.47	-21.99
512.00	5.28	320.30	511.66	8.82	-6.18	10.73	2.11	2.09	-2.89
605.00	6.90	320.54	604.13	16.43	-12.46	20.60	1.74	1.74	0.26
700.00	8.53	318.63	698.26	26.12	-20.75	33.35	1.74	1.72	-2.01
794.00	9.23	318.28	791.14	36.98	-30.37	47.85	0.75	0.74	-0.37
888.00	9.48	324.22	883.89	48.89	-39.91	63.11	1.06	0.27	6.32
981.00	10.29	320.91	975.51	61.55	-49.63	79.05	1.06	0.87	-3.56

# Andarko Petroleum Corporation

## Survey Report

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well BONANZA 1023-6K2CS
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	5219' GL + 15' RKB @ 5234.00ft
<b>Site:</b>	UINTAH_BONANZA 1023-6K PAD	<b>MD Reference:</b>	5219' GL + 15' RKB @ 5234.00ft
<b>Well:</b>	BONANZA 1023-6K2CS	<b>North Reference:</b>	True
<b>Wellbore:</b>	BONANZA 1023-6K2CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	BONANZA 1023-6K2CS	<b>Database:</b>	edmp

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,075.00	10.64	321.36	1,067.94	74.84	-60.34	96.12	0.38	0.37	0.48
1,167.00	11.41	321.27	1,158.25	88.57	-71.34	113.71	0.84	0.84	-0.10
1,261.00	10.32	320.40	1,250.56	102.32	-82.52	131.43	1.17	-1.16	-0.93
1,355.00	9.15	318.54	1,343.20	114.41	-92.84	147.32	1.29	-1.24	-1.98
1,451.00	9.32	319.07	1,437.96	126.00	-102.99	162.72	0.20	0.18	0.55
1,545.00	9.67	317.22	1,530.67	137.54	-113.34	178.22	0.49	0.37	-1.97
1,641.00	10.02	314.50	1,625.26	149.32	-124.77	194.58	0.61	0.36	-2.83
1,736.00	9.85	317.49	1,718.84	161.10	-136.15	210.92	0.57	-0.18	3.15
1,832.00	9.23	323.55	1,813.51	173.34	-146.28	226.81	1.23	-0.65	6.31
1,925.00	9.85	323.02	1,905.22	185.70	-155.49	242.20	0.67	0.67	-0.57
2,020.00	9.76	318.80	1,998.84	198.25	-165.69	258.37	0.76	-0.09	-4.44
2,114.00	10.01	322.79	2,091.44	210.75	-175.87	274.49	0.78	0.27	4.24
2,208.00	9.41	324.96	2,184.10	223.55	-185.23	290.31	0.75	-0.64	2.31
2,303.00	9.76	322.67	2,277.77	236.31	-194.57	306.10	0.54	0.37	-2.41
2,398.00	9.58	321.00	2,371.42	248.86	-204.43	322.04	0.35	-0.19	-1.76
2,415.00	9.32	321.44	2,388.19	251.03	-206.18	324.83	1.59	-1.53	2.59
<b>FIRST MWD SURVEY</b>									
2,532.00	8.83	317.52	2,503.73	265.06	-218.15	343.28	0.67	-0.42	-3.35
2,622.00	7.81	312.34	2,592.78	274.28	-227.33	356.24	1.41	-1.13	-5.76
2,713.00	6.10	309.16	2,683.11	281.50	-235.65	367.11	1.93	-1.88	-3.49
2,804.00	4.69	312.82	2,773.70	287.08	-242.13	375.55	1.59	-1.55	4.02
2,895.00	3.31	292.57	2,864.48	290.61	-247.28	381.57	2.15	-1.52	-22.25
2,985.00	2.13	280.07	2,954.38	291.90	-251.33	385.15	1.46	-1.31	-13.89
3,076.00	1.00	257.82	3,045.34	292.03	-253.77	386.82	1.39	-1.24	-24.45
3,167.00	0.50	161.82	3,136.34	291.49	-254.42	386.82	1.28	-0.55	-105.49
3,258.00	0.81	156.19	3,227.33	290.52	-254.04	385.83	0.35	0.34	-6.19
3,349.00	1.06	150.82	3,318.32	289.20	-253.37	384.39	0.29	0.27	-5.90
3,439.00	1.50	159.32	3,408.30	287.37	-252.55	382.46	0.53	0.49	9.44
3,530.00	1.75	157.19	3,499.26	284.97	-251.59	380.00	0.28	0.27	-2.34
3,621.00	0.88	155.07	3,590.24	283.06	-250.76	378.00	0.96	-0.96	-2.33
3,712.00	0.81	77.57	3,681.23	282.56	-249.83	377.03	1.16	-0.08	-85.17
3,802.00	0.81	108.57	3,771.22	282.50	-248.61	376.19	0.48	0.00	34.44
3,893.00	1.25	135.32	3,862.21	281.59	-247.30	374.66	0.70	0.48	29.40
3,984.00	1.31	140.69	3,953.18	280.08	-245.94	372.63	0.15	0.07	5.90
4,075.00	1.44	153.82	4,044.16	278.25	-244.78	370.48	0.37	0.14	14.43
4,165.00	1.94	155.07	4,134.12	275.85	-243.64	367.90	0.56	0.56	1.39
4,256.00	2.00	153.82	4,225.06	273.03	-242.29	364.87	0.08	0.07	-1.37
4,347.00	1.00	102.07	4,316.03	271.44	-240.81	362.71	1.75	-1.10	-56.87
4,438.00	1.19	13.44	4,407.02	272.19	-239.82	362.64	1.69	0.21	-97.40
4,528.00	2.69	359.57	4,496.97	275.21	-239.61	364.83	1.73	1.67	-15.41
4,619.00	2.69	1.56	4,587.87	279.48	-239.57	368.08	0.10	0.00	2.19
4,710.00	2.25	5.56	4,678.78	283.39	-239.34	370.94	0.52	-0.48	4.40
4,801.00	2.06	8.56	4,769.72	286.79	-238.92	373.27	0.24	-0.21	3.30

# Andarko Petroleum Corporation

## Survey Report

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well BONANZA 1023-6K2CS
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	5219' GL + 15' RKB @ 5234.00ft
<b>Site:</b>	UINTAH_BONANZA 1023-6K PAD	<b>MD Reference:</b>	5219' GL + 15' RKB @ 5234.00ft
<b>Well:</b>	BONANZA 1023-6K2CS	<b>North Reference:</b>	True
<b>Wellbore:</b>	BONANZA 1023-6K2CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	BONANZA 1023-6K2CS	<b>Database:</b>	edmp

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,891.00	1.81	8.06	4,859.67	289.80	-238.48	375.30	0.28	-0.28	-0.56
4,982.00	1.50	13.57	4,950.63	292.38	-238.00	376.97	0.38	-0.34	6.05
5,073.00	1.13	22.94	5,041.61	294.36	-237.37	378.09	0.47	-0.41	10.30
5,164.00	0.88	23.69	5,132.59	295.83	-236.74	378.81	0.28	-0.27	0.82
5,254.00	0.81	37.07	5,222.58	296.97	-236.08	379.26	0.23	-0.08	14.87
5,345.00	0.88	67.82	5,313.57	297.74	-235.05	379.19	0.50	0.08	33.79
5,436.00	0.88	93.19	5,404.56	297.97	-233.70	378.50	0.42	0.00	27.88
5,527.00	1.06	109.07	5,495.55	297.66	-232.21	377.30	0.35	0.20	17.45
5,617.00	1.31	124.44	5,585.53	296.80	-230.57	375.60	0.45	0.28	17.08
5,708.00	1.50	128.57	5,676.50	295.47	-228.79	373.43	0.24	0.21	4.54
5,799.00	1.81	171.32	5,767.47	293.31	-227.64	371.03	1.36	0.34	46.98
5,890.00	2.06	171.07	5,858.42	290.27	-227.17	368.40	0.27	0.27	-0.27
5,981.00	2.19	169.94	5,949.35	286.94	-226.61	365.49	0.15	0.14	-1.24
6,071.00	2.13	166.19	6,039.29	283.63	-225.91	362.50	0.17	-0.07	-4.17
6,162.00	2.13	165.34	6,130.23	280.35	-225.08	359.45	0.03	0.00	-0.93
6,253.00	1.06	167.44	6,221.19	277.89	-224.47	357.17	1.18	-1.18	2.31
6,344.00	0.50	299.82	6,312.19	277.27	-224.63	356.80	1.59	-0.62	145.47
6,435.00	1.00	296.07	6,403.18	277.81	-225.69	357.89	0.55	0.55	-4.12
6,526.00	1.88	317.32	6,494.15	279.26	-227.41	360.11	1.12	0.97	23.35
6,616.00	2.00	339.07	6,584.10	281.81	-228.97	363.07	0.82	0.13	24.17
6,707.00	1.50	344.07	6,675.06	284.44	-229.87	365.66	0.57	-0.55	5.49
6,798.00	0.81	350.57	6,766.04	286.22	-230.30	367.30	0.77	-0.76	7.14
6,889.00	0.19	334.82	6,857.03	286.99	-230.47	368.00	0.69	-0.68	-17.31
6,980.00	0.50	133.32	6,948.03	286.85	-230.24	367.76	0.75	0.34	174.18
7,070.00	0.81	151.32	7,038.03	286.03	-229.65	366.74	0.41	0.34	20.00
7,161.00	1.50	158.19	7,129.01	284.36	-228.90	364.98	0.77	0.76	7.55
7,252.00	1.69	160.82	7,219.97	281.98	-228.02	362.59	0.22	0.21	2.89
7,343.00	0.88	189.19	7,310.95	280.03	-227.69	360.88	1.11	-0.89	31.18
7,433.00	1.06	270.44	7,400.94	279.35	-228.63	360.96	1.41	0.20	90.28
7,524.00	1.06	257.69	7,491.93	279.18	-230.30	361.90	0.26	0.00	-14.01
7,615.00	1.50	300.69	7,582.90	279.61	-232.14	363.41	1.12	0.48	47.25
7,706.00	0.75	289.69	7,673.89	280.42	-233.73	365.05	0.85	-0.82	-12.09
7,797.00	0.31	208.94	7,764.88	280.40	-234.41	365.47	0.84	-0.48	-88.74
7,887.00	0.63	148.19	7,854.88	279.77	-234.27	364.90	0.61	0.36	-67.50
7,978.00	0.81	136.57	7,945.87	278.87	-233.56	363.76	0.25	0.20	-12.77
8,069.00	0.75	130.69	8,036.86	278.02	-232.67	362.53	0.11	-0.07	-6.46
8,159.00	0.94	130.44	8,126.85	277.16	-231.66	361.22	0.21	0.21	-0.28
8,250.00	0.94	130.19	8,217.84	276.19	-230.52	359.75	0.00	0.00	-0.27
8,341.00	0.88	135.57	8,308.83	275.21	-229.46	358.32	0.11	-0.07	5.91
8,432.00	1.06	139.57	8,399.82	274.07	-228.42	356.78	0.21	0.20	4.40
8,564.00	1.35	151.98	8,531.79	271.77	-226.90	354.04	0.29	0.22	9.40
<b>LAST MWD SURVEY</b>									
8,614.00	1.35	151.98	8,581.78	270.73	-226.35	352.88	0.00	0.00	0.00
<b>PROJECTION TO TD</b>									

# Andarko Petroleum Corporation

## Survey Report

<b>Company:</b>	US ROCKIES REGION PLANNING	<b>Local Co-ordinate Reference:</b>	Well BONANZA 1023-6K2CS
<b>Project:</b>	UTAH - UTM (feet), NAD27, Zone 12N	<b>TVD Reference:</b>	5219' GL + 15' RKB @ 5234.00ft
<b>Site:</b>	UINTAH_BONANZA 1023-6K PAD	<b>MD Reference:</b>	5219' GL + 15' RKB @ 5234.00ft
<b>Well:</b>	BONANZA 1023-6K2CS	<b>North Reference:</b>	True
<b>Wellbore:</b>	BONANZA 1023-6K2CS	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	BONANZA 1023-6K2CS	<b>Database:</b>	edmp

### Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
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### Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		
		+N/-S (ft)	+E/-W (ft)	Comment
2,415.00	2,388.19	251.03	-206.18	FIRST MWD SURVEY
8,564.00	8,531.79	271.77	-226.90	LAST MWD SURVEY
8,614.00	8,581.78	270.73	-226.35	PROJECTION TO TD

Checked By: _____	Approved By: _____	Date: _____
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**STATE OF UTAH**  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 6

**ENTITY ACTION FORM**

Operator: KERR McGEE OIL & GAS ONSHORE LP Operator Account Number: N 2995  
Address: P.O. Box 173779  
city DENVER  
state CO zip 80217 Phone Number: (720) 929-6304

**Well 1**

API Number	Well Name		QQ	Sec	Twp	Rng	County
Various	Ponderosa Wells						UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
	18421	18519				5/1/2012	
<b>Comments:</b> Move the attached wells into the Ponderosa unit. All wells are WSMVD. 11/16/2012							

**Well 2**

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
<b>Comments:</b>							

**Well 3**

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
<b>Comments:</b>							

**ACTION CODES:**

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

JAIME SCHARNOWSKE

Name (Please Print)

Signature

REGULATORY ANALYST

Title

11/8/2012

Date

RECEIVED

NOV 08 2012

Well Name	Quarter/Quarter	Section	Township	Range	APUI Number	County	New Entity Number	Formation
BONANZA 1023-6J2AS	NESW	6	10S	23E	4304751465	Uintah	18519	WSMVD
BONANZA 1023-6K1CS	NESW	6	10S	23E	4304751466	Uintah	18519	WSMVD
BONANZA 1023-6K2BS	NESW	6	10S	23E	4304751467	Uintah	18519	WSMVD
BONANZA 1023-6K2CS	NESW	6	10S	23E	4304751468	Uintah	18519	WSMVD
BONANZA 1023-6L2AS	NESW	6	10S	23E	4304751469	Uintah	18519	WSMVD
BONANZA 1023-6L2DS	NESW	6	10S	23E	4304751470	Uintah	18519	WSMVD
BONANZA 1023-6O1BS	SWSE	6	10S	23E	4304751473	Uintah	18519	WSMVD
BONANZA 1023-6O2DS	SWSE	6	10S	23E	4304751474	Uintah	18519	WSMVD
BONANZA 1023-6O3AS	SWSE	6	10S	23E	4304751475	Uintah	18519	WSMVD
BONANZA 1023-6P2BS	SWSE	6	10S	23E	4304751476	Uintah	18519	WSMVD
BONANZA 1023-6P3CS	SWSE	6	10S	23E	4304751478	Uintah	18519	WSMVD
BONANZA 1023-5J2DS	NESW	5	10S	23E	4304752063	Uintah	18519	WSMVD
BONANZA 1023-5K1BS	NESW	5	10S	23E	4304752064	Uintah	18519	WSMVD
BONANZA 1023-5K1CS	NESW	5	10S	23E	4304752065	Uintah	18519	WSMVD
BONANZA 1023-5K3DS	NESW	5	10S	23E	4304752066	Uintah	18519	WSMVD
BONANZA 1023-5L1DS	NESW	5	10S	23E	4304752067	Uintah	18519	WSMVD
BONANZA 1023-5L4AS	NESW	5	10S	23E	4304752068	Uintah	18519	WSMVD
BONANZA 1023-5L4DS	NESW	5	10S	23E	4304752069	Uintah	18519	WSMVD
BONANZA 1023-5O2AS	NESW	5	10S	23E	4304752070	Uintah	18519	WSMVD
BONANZA 1023-5E3BS	SWNW	5	10S	23E	4304752071	Uintah	18519	WSMVD
BONANZA 1023-5E3CS	SWNW	5	10S	23E	4304752072	Uintah	18519	WSMVD
BONANZA 1023-5L1AS	SWNW	5	10S	23E	4304752073	Uintah	18519	WSMVD
BONANZA 1023-5L3BS	SWNW	5	10S	23E	4304752074	Uintah	18519	WSMVD
BONANZA 1023-5M1AS	SWSW	5	10S	23E	4304752075	Uintah	18519	WSMVD
BONANZA 1023-5M1CS	SWSW	5	10S	23E	4304752076	Uintah	18519	WSMVD
BONANZA 1023-5M3BS	SWSW	5	10S	23E	4304752077	Uintah	18519	WSMVD
BONANZA 1023-5M3CS	SWSW	5	10S	23E	4304752078	Uintah	18519	WSMVD
BONANZA 1023-5N3CS	SWSW	5	10S	23E	4304752079	Uintah	18519	WSMVD
BONANZA 1023-5O4BS	SESE	5	10S	23E	4304752082	Uintah	18519	WSMVD
BONANZA 1023-5P1AS	SESE	5	10S	23E	4304752083	Uintah	18519	WSMVD
BONANZA 1023-5P1CS	SESE	5	10S	23E	4304752084	Uintah	18519	WSMVD
BONANZA 1023-5P4CS	SESE	5	10S	23E	4304752085	Uintah	18519	WSMVD
BONANZA 1023-5C4AS	NENW	5	10S	23E	4304752089	Uintah	18519	WSMVD
BONANZA 1023-5F2CS	NENW	5	10S	23E	4304752090	Uintah	18519	WSMVD
BONANZA 1023-5F3AS	NENW	5	10S	23E	4304752091	Uintah	18519	WSMVD
BONANZA 1023-5C2CS	NWNW	5	10S	23E	4304752092	Uintah	18519	WSMVD
BONANZA 1023-5D2DS	NWNW	5	10S	23E	4304752093	Uintah	18519	WSMVD
BONANZA 1023-5D3AS	NWNW	5	10S	23E	4304752094	Uintah	18519	WSMVD
BONANZA 1023-5E2AS	NWNW	5	10S	23E	4304752095	Uintah	18519	WSMVD
BONANZA 1023-6A1CS	NWNW	5	10S	23E	4304752096	Uintah	18519	WSMVD
BONANZA 1023-6I3AS	SWNW	5	10S	23E	4304752387	Uintah	18519	WSMVD
BONANZA 11-2	SWNW	11	10S	23E	4304734773	Uintah	18519	WSMVD
BONANZA 1023-6E4AS	SENE	6	10S	23E	4304751453	Uintah	18519	WSMVD
BONANZA 1023-6F1AS	SENE	6	10S	23E	4304751454	Uintah	18519	WSMVD
BONANZA 1023-6F1CS	SENE	6	10S	23E	4304751455	Uintah	18519	WSMVD
BONANZA 1023-6F4CS	SENE	6	10S	23E	4304751456	Uintah	18519	WSMVD
BONANZA 1023-6G2AS	SENE	6	10S	23E	4304751457	Uintah	18519	WSMVD
BONANZA 1023-6G4CS	SENE	6	10S	23E	4304751458	Uintah	18519	WSMVD
BONANZA 1023-6A3DS	SENE	6	10S	23E	4304751459	Uintah	18519	WSMVD
BONANZA 1023-6G1DS	SENE	6	10S	23E	4304751460	Uintah	18519	WSMVD
BONANZA 1023-6H1BS	SENE	6	10S	23E	4304751461	Uintah	18519	WSMVD
BONANZA 1023-6H2CS	SENE	6	10S	23E	4304751462	Uintah	18519	WSMVD
BONANZA 1023-6I2AS	SENE	6	10S	23E	4304751463	Uintah	18519	WSMVD
BONANZA 1023-6I3DS	SWSE	6	10S	23E	4304751471	Uintah	18519	WSMVD
BONANZA 1023-6J4AS	SWSE	6	10S	23E	4304751472	Uintah	18519	WSMVD
BONANZA 1023-6P3AS	SWSE	6	10S	23E	4304751477	Uintah	18519	WSMVD